

**CBSE**  
**Class XII Economics**  
**Sample Paper – 3**

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**SECTION A**

**Answer 1**

**Explicit cost:** Cost of rent of the building

**Implicit cost:** Cost of managerial services provided by Ram

**(OR)**

TR of 12 books =  $400 \times 12 = \text{Rs } 4800$

MR of 13<sup>th</sup> book = Rs 500

TR of 13 books =  $400 \times 13 = \text{Rs } 5200$

Price (AR) of 13<sup>th</sup> book = TR of 13 books / 13  
 $= 5200 / 13 = 400$

Therefore price of 13<sup>th</sup> book = Rs 400

**Answer 2**

The correct answer is (b). Price discrimination refers to charging a different price for the same product from different buyers. It is a feature of a monopoly firm.

**Answer 3**

Average fixed cost (AFC) refers to the fixed cost per unit of output. Algebraically,

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

**Answer 4**

The correct answer is option (a). When the supply of a good changes due to change in any factor other than the own price of the good, it is known as change in supply. This leads to shift in the supply curve either rightward or leftward.

**(OR)**

The correct answer is option (c).

$$\text{Percentage change in price} = \frac{\Delta P}{P} \times 100 = 0.4 \times 100 = 40\%$$

$$\text{Price elasticity of supply (E}_s\text{)} = \frac{\text{Percentage change in supply}}{\text{Percentage change in price}}$$

$$1.5 = \frac{\text{Percentage change in supply}}{40\%}$$

$$\text{Percentage change in supply} = 1.5 \times 40 = 60\%$$

**Answer 5**

According to the indifference curve analysis, a consumer is at equilibrium when

$$MRS_{xy} = \frac{P_x}{P_y}$$

According to the given information,

$$MRS_{xy} = 5$$

$$\frac{P_x}{P_y} = \frac{5}{5} = 1$$

$$\text{So, } MRS_{xy} > \frac{P_x}{P_y}$$

To restore equilibrium, the consumer would increase consumption of Good X and reduce consumption of Good Y.

**(OR)**

As we know that a consumer attains equilibrium when

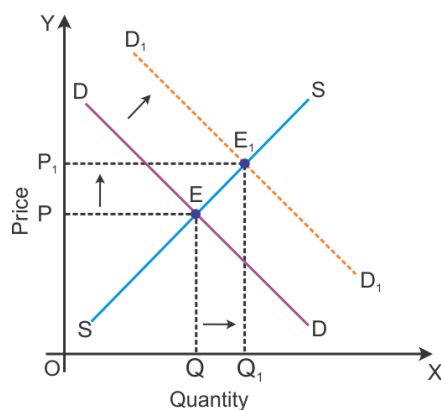
$$\frac{MU_x}{P_x} = MU_M$$

Given that

$$\frac{MU_x}{P_x} > MU_M \text{ at 5 units of a good are consumed}$$

The consumer should not stop consuming the good X to attain equilibrium. In this situation,  $MU_x$  should reduce because the marginal utility of money and price remains constant. So, the consumer will tend to increase the consumption of good X. This will reduce the marginal utility obtained from its successive units due to law of diminishing returns.

**Answer 6**



In the diagram, DD is the initial demand curve and SS is the initial supply curve. Point E is the initial equilibrium point where DD intersects SS. Correspondingly, OQ is the equilibrium quantity and OP is the equilibrium price. With the increase in demand, the demand curve shifts parallelly outwards to D'D'. However, the supply remains the same. At the existing price, there is excess demand in the market. As a result, the price tends to rise. With the rise in price, the quantity demanded tends to fall, while the quantity supplied tends to rise. This process continues till excess demand is eliminated.

The new equilibrium is established at Point E' where D'D' intersects SS. Here, both equilibrium price and equilibrium quantity have risen to OP<sub>1</sub> and OQ<sub>1</sub>, respectively. However, the rise in price is more than the rise in quantity.

### Answer 7

a. Economic problem or the problem of choice refers to the problem of allocating resources to different alternative uses in the face of limited means and unlimited wants.

Reasons for economic problem:

- i. **Scarcity of resources:** In every economy, resources are always scarce in relation to the needs and wants. No matter how much resources economy may have, it will not be able to satisfy all the needs. The problem of scarcity of resources cannot be avoided at all.
- ii. **Alternative uses of resources:** Resources are not just scarce in relation to the needs, but they can be put to different alternative uses as well. For example, a piece of land can be used for farming or for the construction of a building. Accordingly, the resources must be managed and put to the best possible use.

b. Differences between microeconomics and macroeconomics:

<b>Microeconomics</b>	<b>Macroeconomics</b>
Microeconomics refers to the study of economic problem at the individual or household level.	Macroeconomics refers to the study of economic problem or the problem of choice for the economy as a whole.
It deals with the determination of price and output for an individual firm or industry.	It deals with the determination of general price and aggregate output for the economy as a whole.
It studies partial equilibrium, i.e. it assumes that macro variables remain constant.	It studies general equilibrium, i.e. various variables change simultaneously.

(OR)

<b>Basis</b>	<b>Positive Economics</b>	<b>Normative economics</b>
<i>Meaning</i>	Studies with what is or how the economic problem are originally solved.	Studies with what ought or how the economic problem should be solved.

<i>Validity</i>	It can be verified with original data.	It cannot be verified with original data.
<i>Aim</i>	It aims to provide original description of an economic activity.	It aims to determine the principles.
<i>Suggestive</i>	It is based on set of collected facts.	It is based on opinion of the individual.
<i>Example</i>	Prices and inequalities of income level in an economy.	Government should generate more employment opportunities.

### Answer 8

- a. **Income of the consumer:** How the income of the consumer affects the demand depends on the type of good.
- Normal goods: For normal goods, as the income of the consumer increases, the demand increases and *vice versa*.
  - Inferior goods: In case of inferior goods, with an increase in income, the demand decreases and *vice versa*.
- b. **Future expectations:** Future expectations about the price and availability of the commodity also affect the demand for the commodity. For instance, if the consumer expects that there would be a shortage of the commodity in the future, then he will increase the demand even at the existing price.

### Answer 9

Given

Initial price (P) = Rs 10

Final price ( $P_1$ ) = Rs 12

Initial Quantity (Q) = 8

Price elasticity ( $e_s$ ) = 1.25

Let the final quantity be  $Q_2$

Now,

$$e_s = \frac{P}{Q} \times \frac{\Delta Q}{\Delta P}$$

$$1.66 = \frac{P}{Q} \times \frac{\Delta Q}{\Delta P}$$

$$1.25 = \frac{10}{8} \times \frac{\Delta Q}{(12-10)}$$

$$\Delta Q = 2$$

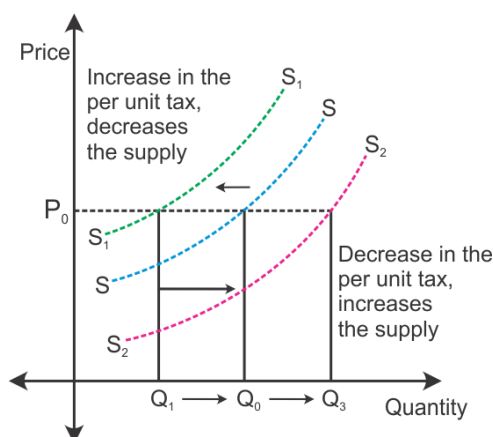
$$\text{So, final quantity} = (8 + 2) = 10 \text{ units}$$

(OR)

Change in supply means a situation where there will be ***an increase or decrease in the quantity of a good supplied at a constant price***. At a constant price, changes in other factors of production will cause a change in supply. The change will cause a forward or backward shift in the curve as (i) an increase in supply and (ii) a decrease in supply.

**Effect of tax:** Assuming other things remain constant, the levy of a tax on a good shows a negative relationship with the supply of a good.

When there is a rise in taxes, there will be an increase in the cost of production which results in a decline in the profit margin and the supply of good. The supply curve S shifts leftwards from S to S<sub>1</sub>. It leads to a fall in the supply of good from OQ<sub>0</sub> to OQ<sub>1</sub>, where the price remains constant at OP.



When there is a decrease in taxes, there will be a decrease in the cost of production which results in a rise in the profit margin and the supply of good. The supply curve S shifts leftwards from S to S<sub>2</sub>. It leads to an increase in the supply of good from OQ<sub>0</sub> to OQ<sub>3</sub> where the price remains constant at OP.

### Answer 10

According to the utility analysis, if a consumer consumes two goods, then he strikes his equilibrium when the last rupee spent on Good X or Good Y yields the same level of satisfaction.

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

In other words, a consumer is at equilibrium or derives maximum satisfaction when the rupee worth of marginal utility derived from the two commodities is equal.

This can be better understood with the help of the following example:

Suppose a consumer consumes two commodities X and Y, both priced at Rs 5 per unit. He has a total of Rs 140 with him. The marginal utility schedule of the two commodities is given below:

Units	Marginal Utility of X (utils)	Marginal Utility of Y (utils)
1	30	40
2	25	35
3	20	28
4	15	20
5	10	10
6	0	0

The consumer would strike equilibrium at the point where

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

Now, because the price of the two commodities is equal, the equation becomes

$$MU_x = MU_y$$

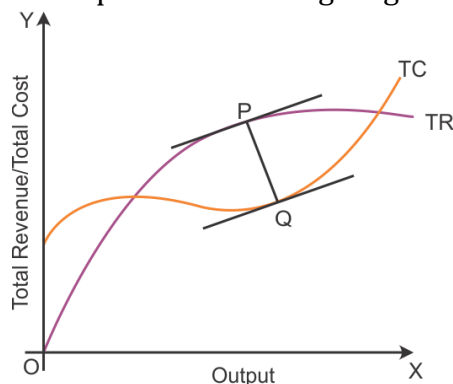
The consumer strikes equilibrium where he consumes 3 units of Commodity X and 4 units of Commodity Y, where the marginal utility of both commodities is equal to 20.

### Answer 11

According to the TR–TC approach, a producer strikes equilibrium at the point where the difference between total revenue and total cost is maximum, or in other words, where the total profits are maximised.

This corresponds to the situation of marginal revenue equal to marginal cost and rising marginal cost.

This can be understood with the help of the following diagram:



According to the diagram, TR and TC are the total revenue and total cost curve, respectively. The difference between the two is maximised at PQ.

Note that at this point, the slope of TR, i.e. MR (as given by tangent at Point P) is equal to slope of TC, i.e. MC (as given by tangent at Point P).

Moreover, at Point Q, TC is increasing at an increasing rate. So, MC is rising at this point.

**Answer 12**

<i><b>Monopolistic Competition</b></i>	<i><b>Monopoly</b></i>
There are a large number of buyers and sellers.	There is a single seller against a large number of buyers.
The entry of new firms in the market is not restricted.	There is restriction to the entry of new firms.
A firm under monopolistic competition faces a relatively more elastic demand curve.	The demand curve faced by the firm is relatively less elastic.
A single firm has only partial control over the price.	The monopolist has complete control over the price.
Due to differentiated products, selling costs are highly essential.	No selling costs are required under monopoly.
In the long run, a firm under monopolistic competition earns normal profits.	In the long run, a monopoly firm earns super normal profits.

**(OR)**

- i. **Implications of Freedom of entry and exit to firms in industry:** Monopolistic competition is a form of market in which there are many sellers of the product, but the product of each seller is different from one another. There is no barrier to the entry and exit of new firms. They earn neither abnormal profit nor loss in the long run. However, the entry of firms is not as easy in perfect competition. As there are many rivals and close substitutes of products in the market, a monopolistic firm cannot have full control over the price. If the price exceeds the minimum of short run average cost, then the new firms are attracted into the industry. Similarly, if the price exceeds the minimum of long run average cost, then the new firms are attracted into the industry. On the other hand, if the supply exceeds with the entry of new firms in the market, then the price will decline. At the low level of price, certain firms exit the industry to avoid any loss. Then, the supply will decrease with the exit of firms and the price will rise to the minimum cost to earn normal profit. This situation prevails because of free entry and exit of firms.
- ii. **Implications of non-price competition:** In an oligopoly market, firms do not compete each other with changes in the price. If the firm increases the price, rival firms may not increase it, so it will lead to a loss of the market. Consumers will shift to rival firms. On the other hand, if the firm decreases the price, the rival firms may decrease it, so it will lead to a loss of total revenue. There will not be increase in the demand for the product. They take into consideration the decisions of rival firms, and hence, the price does not move freely and it leads to non-price competition. High selling cost prevails in the market, resources are not fully used and welfare is not maximised.

**SECTION B****Answer 13**

The two sources of revenue receipts are tax receipts (direct taxes and indirect taxes) and non-tax receipts (such as receipts from interest, fines and interests).

**Answer 14**

The correct answer is (b). It is the fiscal deficit which indicates the total borrowing requirements of the government. Fiscal deficit refers to a budgetary situation where the total receipt of the government (excluding borrowings) is less than the total expenditure of the government.

**(OR)**

The correct answer is (b). Interest payments 10% on revenue deficit. Therefore,

Interest payments =  $10/100 \times 3000 = \text{Rs } 300 \text{ lakh}$

Primary deficit = Fiscal deficit – interest payments

$8600 = \text{Fiscal deficit} - 300$

Fiscal deficit =  $8600 + 300 = \text{Rs } 9100 \text{ lakh}$

**Answer 15**

APC can never be zero because consumption can never be zero. Even at zero level of income, consumption is not zero (there is autonomous consumption). Accordingly, APC cannot be zero.

**Answer 16**

The correct answer is option (b). Excess demand increases the general price level (inflation) i.e. continuous increase in price without any increase in the output and employment.

**Answer 17**

- a. Medium of exchange:** Money is used as a medium of exchange in various transactions. It is accepted as a mode of payment in various transactions of goods and services. With money as a medium of exchange, selling and buying can be conducted independently. That is, purchasing and selling can be done at different points of time.
- b. Standard of deferred payments:** Standard of deferred payments means making payments in the future. With money as a medium of exchange, such transactions can also be undertaken wherein payments are not made immediately. In this way, money enables borrowing and lending operations in the economy, which in turn helps in capital formation.

**(OR)**



- Precautionary motive refers to the desire of the people to hold cash balances for unforeseen contingencies. The amount of money held for this purpose is positively related to the level of income.
- Transaction motive refers to the desire of the people to hold cash balances to meet the day-to-day transactions.
- Speculative motive refers to the desire of the people to hold cash balances as an alternative to financial assets. The amount of money held for this purpose depends upon the expectation of changes in the rate of interest or capital value of assets in future. So, the people tend to hold less at high rates of interest and hold more at low rates of interest.

### Answer 18

The Central Bank is called the banker to the government as it performs the various banking functions for it. It acts as a banker, agent and advisor to the government. In doing so, it performs the following functions for the government:

- Maintaining a current account for cash balances of the government
- Accepting receipts and making payments on behalf of the government
- Carrying out exchange remittances and various other banking operations
- Providing loans to the government
- Managing public debt
- Advising the government on economic, financial and monetary matters

### Answer 19

We know,

National Income,  $Y = C + I$

Now,

$$C = \bar{C} + cY$$

So,

$$Y = \bar{C} + cY + I$$

$$Y = 150 + 0.80Y + 60$$

$$0.20Y = 210$$

$$Y = \text{Rs } 1,050 \text{ crore}$$

(OR)

- a. **Difference between average propensity to consume and marginal propensity to consume**

Marginal Propensity to Consume	Average Propensity to Consume
Ratio of change in consumption ( $\Delta C$ ) to change in income ( $\Delta Y$ )	Ratio of consumption expenditure (C) to level of income (Y)
Example:	Example:

$\Delta Y = \text{Rs} 500$ $\Delta C = \text{Rs} 100$ $MPC = c = \frac{\Delta C}{\Delta Y}$ $= \frac{100}{500} = 0.2$	$Y = \text{Rs} 1,200$ $C = \text{Rs} 900$ $APC = \frac{C}{Y}$ $= \frac{900}{1,200} = 0.75$
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**b. Two components of aggregate demand:**

- Private consumption expenditure (C) refers to total expenditure to be incurred by all households on the purchase of goods and services such as food, clothing and housing
- Private investment expenditure (I) refers to planned expenditure by private entrepreneurs on creation of capital goods for profit motive

**Answer 20**

Private income = Income from domestic product accruing to private sector + Net factor income from abroad + Current transfers from government + Current transfers from ROW  
 $= 3,000 + 50 + 100 + 30$   
 $= \text{Rs } 3,180 \text{ crore}$

**Answer 21**

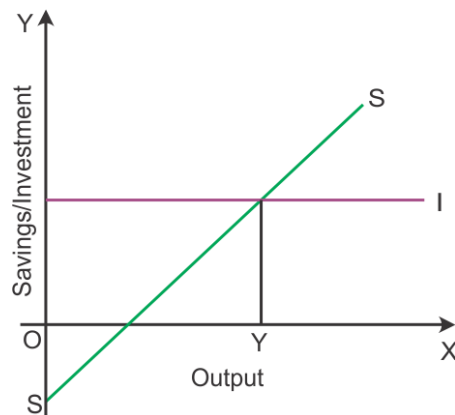
Government budget refers to an annual financial statement which presents the estimated receipts and expenditures of the government during a financial year.

Government budget helps in bringing stability in the economy. Every economy witnesses fluctuations in the form of inflation or deflation. Different budgetary policies are used to combat different phases in business cycles. In the phase of inflation, policy of surplus budget is followed. On the other hand, in the phase of deflation, policy of deficit budget is followed.

Another major objective of the government budget is economic growth. For this, the budgetary policies aim at stimulating the rate of saving and investment in the economy. Various provisions and policies are followed such that they raise the rate of saving and investment in the economy.

**Answer 22**

According to the saving–investment approach, equilibrium is attained at the point where planned saving is equal to planned investment.



According to the diagram, equilibrium is attained at Point E, where the saving curve SS intersects the investment curve I. Corresponding to this, the equilibrium level of output is OY.

In case of any deviation from the equilibrium level of output, a readjustment would start which would again bring back the economy to equilibrium.

If planned saving is more than planned investment, then there would be a rise in the level of inventory. To correct the situation, firms would reduce output and employment till investment and saving become equal to each other.

On the other hand, if planned saving is less than planned investment, then there would be a fall in the level of inventory. To correct the situation, firms would increase output and employment till investment and saving become equal to each other.

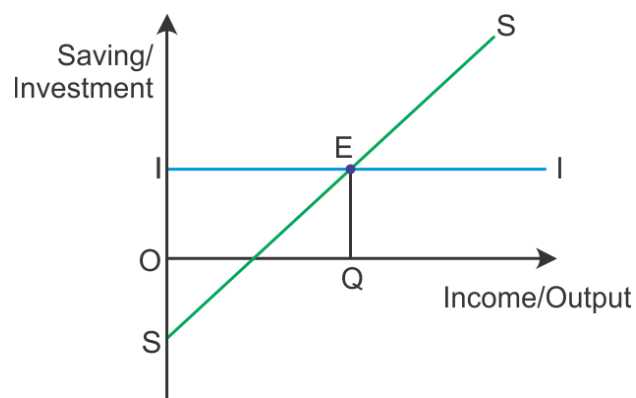
**(OR)**

An economy is in equilibrium when any of the following two conditions are satisfied:

- i. Aggregate demand = Aggregate supply
- ii. Saving = Investment

### **Saving and Investment Approach**

In the saving and investment approach, the equilibrium is attained at the point where saving and investment will intersect each other, i.e. leakages are equal to injections.



In the diagram, SS and II is the saving curve and investment curve, respectively. The II curve is a horizontal line which implies the autonomous investment. OQ is the equilibrium level of income where the SS and II curves intersect each other at Point E.

**Saving < investment on the left side of equilibrium point E:**

Investment exceeding saving implies that the injection into the circular flow of income is more than the withdrawal from the income. Supply of goods and services is not sufficient to meet the demand for goods and services. As consumption is high, there will be a low amount of saving and thereby planned output is not sufficient to meet the demand. This leads to a fall in the inventory, and therefore, the savings need to increase. This is possible only when the savings are again equal to the investment and the equilibrium is restored.

**Saving > investment on the right side of equilibrium point E:**

Saving exceeding investment implies that the withdrawal from the income is more than the injection into the circular flow of income. Consumption of goods and services is less than the supply of goods and services. As saving is high, there will be low amounts of consumption and thereby the sold output is less than the planned output. This leads to accumulation of inventory, and therefore, the savings need to reduce. This is possible only when the savings are again equal to the investment and the equilibrium is restored.

**Answer 23**

$$\begin{aligned}\text{National income} &= \text{Private final consumption expenditure} + \text{Government final} \\ &\text{consumption expenditure} + (\text{Net domestic fixed capital formation} + \text{Change in stock}) - \text{Net} \\ &\text{imports} + \text{Net factor income from abroad} - \text{Net indirect taxes} \\ &= 500 + 300 + (50 + 20) - (-10) + 15 - 10 \\ &= \text{Rs 885 crore}\end{aligned}$$

**Answer 24**

Under a flexible exchange rate regime, the exchange rate is determined by the forces of demand and supply.

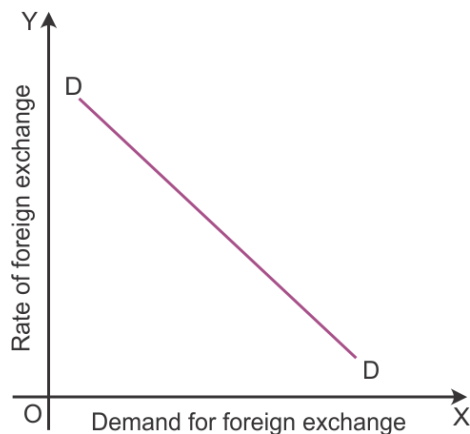
***Demand for Foreign Exchange***

Demand for foreign exchange arises from the need to make payments in foreign exchange. Reasons for demand for foreign exchange:

- i. **Imports:** Imports refer to purchase of goods and services from abroad. Foreign currency is required to make payments for such purchases.
- ii. **Tourism:** Foreign currency is required for meeting expenses in tourism in foreign countries.
- iii. **Unilateral transfers:** People from a domestic country often send gifts or other such unilateral transfers abroad, for which foreign currency is required.

Demand for foreign exchange varies inversely with the foreign exchange rate. As the foreign exchange rate rises, the demand for foreign exchange falls and *vice versa*.

Demand curve for foreign exchange:



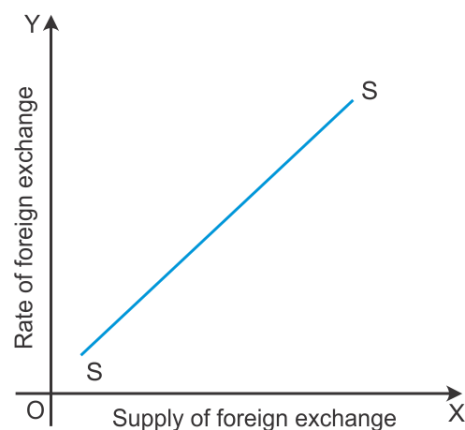
### Supply of Foreign Exchange

Supply of foreign exchange arises from the receipts of foreign exchange. Reasons for supply of foreign exchange:

- Exports:** Exports refer to selling of goods and services abroad. On sale of goods and services abroad, foreign exchange is received.
- Foreign investment:** Foreigners may invest in the domestic country, which in turn brings in foreign exchange to the country.
- Unilateral transfers:** People from the domestic country may receive gifts or other such unilateral transfers from abroad, which brings in foreign currency.

The supply of foreign exchange rate varies directly with the foreign exchange rate. As foreign exchange rate rises, the supply of foreign exchange rises and *vice versa*.

Supply curve of foreign exchange:



### Equilibrium Exchange Rate

Equilibrium exchange rate is determined at the point where the demand for foreign exchange is equal to the supply of foreign exchange. Graphically, it is determined at the point where the demand curve for foreign exchange intersects the supply curve of foreign exchange.

According to the graph, the equilibrium is determined at Point E, where the demand curve DD intersects the supply curve SS. Here, the equilibrium exchange rate is OR and the equilibrium quantity of foreign exchange is OQ.

