

## Economics 2019 Abroad - Set-2

### General Instructions:

- (i) All questions in both the sections are compulsory.
  - (ii) Marks for questions are indicated against each question.
  - (iii) Question Nos. **1 - 4** and **13 - 16** are very short-answer questions carrying **1** mark each. They are required to be answered in **one sentence** each.
  - (iv) Question Nos. **5 - 6** and **17 - 18** are short-answer questions carrying **3** marks each. Answers to them should normally not exceed **60** words each.
  - (v) Question Nos. **7 - 9** and **19 - 21** are also short-answer questions carrying **4** marks each. Answers to them should normally not exceed **70** words each.
  - (vi) Question Nos. **10 - 12** and **22 - 24** are long-answer questions carrying **6** marks each. Answers to them should normally not exceed **100** words each.
  - (vii) Answers should be brief and to the point and the above word limits should be adhered to as far as possible.
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### Question 1

The coefficient of price elasticity of supply of a good is 3. It is known as \_\_\_\_\_.  
(Choose the correct alternative)

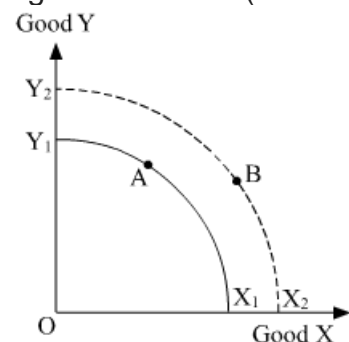
- (a) Unitary Elastic Supply
- (b) Perfectly Inelastic Supply
- (c) Elastic Supply
- (d) Inelastic Supply

### SOLUTION:

The coefficient of price elasticity of supply of a good is 3. It is known as elastic supply. Hence, the correct answer is option (C).

### Question 2

Shift from Point A on Production Possibility Curve  $X_1Y_1$  to point B on  $X_2Y_2$  in the given figure indicates: (Choose the correct alternative)



- (a) Decrease in resources

- (b) Increase in resources
- (c) Full and efficient utilisation of resources
- (d) Wastage of resources

**OR**

A Production Possibility Curve (PPC) would be convex to the origin if Marginal Rate of Transformation (MRT) is \_\_\_\_\_. (Fill up the blank)

**SOLUTION:**

Increase in Resources

Hence, the correct answer is option (B).

**OR**

A Production Possibility Curve would be convex to origin if Marginal Rate of Transformation is decreasing.

**Question 3**

The shape of the average revenue curve under perfect competition would be \_\_\_\_\_. (Fill up the blank)

**SOLUTION:**

The shape of the average revenue curve under perfect competition would be a straight line parallel to the x-axis

**Question 4**

Mention any two examples of implicit cost incurred by a firm.

**OR**

Define variable cost.

**SOLUTION:**

The examples of the implicit cost incurred by a firm are given as follows:

1. Imputed value of the services of the owner of the firm
2. Imputed rent of the owner occupied building

**OR**

Variable Cost refers to those costs which are incurred by a firm on the variable inputs for production. The variable costs are positive function of output i.e. as output increases, variable costs also increases and vice-versa.

**Question 5**

Discuss briefly the central problem of "For whom to produce".

**OR**

Classify the following statements into positive economics or normative economics, with suitable reasons:

- (a) Government should try to control the rising fiscal deficit.
- (b) Real Gross Domestic Product (GDP) is calculated on the basis of 'base year price'.

**SOLUTION:**

The economic problem for whom to produce basically focuses on the distribution mix of the final goods and services produced. The distribution of the final goods and services is equivalent to the distribution of National Income (or National Product) among the factors of production such as land, labour, capital and entrepreneur.

The economy needs to decide a mechanism of distributing the final goods and services among the different segments of population, so as to reduce the inequality of income. This problem is concerned about who gets more or who gets less? Which goods should be made available free or at low (nominal) price and to which segment?

The problem for whom to produce can be divided into two main aspects:

- a) Personal Distribution- It implies the distribution of the national income of a country among the different groups of people in a society.
- b) Functional Distribution- It implies how the total national product of a country is shared among the different factors of production.

**OR**

- (a) Government should try to control the rising fiscal deficit is a normative statement. This is because this given statement involves personal value judgement and cannot be tested and verified.
- (b) Real Gross Domestic Product (GDP) is calculated on the basis of 'baseyear prices' is a positive statement. This is because this statement is giving a fact and can be tested and verified.

**Question 6**

Discuss the relationship between total utility and marginal utility, using a hypothetical schedule.

**SOLUTION:**

Total Utility refers to the aggregate utility or summation of utility derived from the consumption of all the units of a commodity. Algebraically,

$$TU = TU_1 + TU_2 + TU_3 + \dots + TU_n$$

The given is the schedule which shows the relationship between total utility and marginal utility.

Number of Units Consumed of Commodity X	Total Utility (TU)  (utils)	Marginal Utility (MU)  $MU_n = TU_n - TU_{n-1}$  (utils)
1	50	$50 - 0 = 50$
2	100	$100 - 50 = 50$
3	130	$130 - 100 = 30$
4	150	$150 - 130 = 20$
5	160	$160 - 150 = 10$
6	160	$160 - 160 = 0$
7	150	$150 - 160 = -10$

1. As more and more units of the commodity are consumed, the Marginal Utility derived from the consumption of each additional unit of the commodity tends to fall. With the consumption of the successive units, the Marginal Utility becomes zero and consequently becomes negative. (As per the schedule, MU is zero at the consumption of 6th unit and becomes negative at 7th unit consumed).

2. As long as MU derived from the consumption of additional units of the commodity is positive, TU continues to rise. (MU is positive till the consumption of the 5th unit of the commodity.)

3. When TU becomes maximum (also known as Saturation Point), MU becomes zero. (TU is maximum at 160 utils and MU is zero at the 6th unit.)

4. When TU starts falling, MU becomes negative. (For the consumption of 7th unit, MU becomes negative and accordingly the TU falls from 160 utils to 150 utils).

#### Question 7

Discuss briefly the meaning of "Price discrimination" and "Product differentiation" with the help of suitable examples.

**OR**

Is a firm under perfect competition a price taker, or a price maker? Justify your answer.

#### SOLUTION:

**Price Discrimination** - Price discrimination implies charging different prices for the same product from different buyers at the same time. A monopolist firm enjoys the freedom to follow price discrimination. That is, in other words, it can sell the same product to different buyers at different prices at different time periods. For example a monopolist charge the maximum price that each buyer is willing to pay.

**Product Differentiation** - Differentiated Products imply that the products are similar to each other and perform the same basic function yet are different from each other in some or the other manner. The products are hypothetically differentiated from each

other by the producers through advertisements. Take the example of shampoos. Although the basic function of a shampoo is to clean the scalp but the producers try to differentiate their respective brands by highlighting some unique features such as, anti-dandruff, anti-hairfall, protein-rich shampoos, hair root-strengtheners, etc.

OR

A firm under the perfect competition is a price taker. There exist a large number of buyers and sellers in a perfect competitive market. The number of sellers is so large that no individual firm owns the control over the market price of the commodity. Due to the existence of large number of sellers in the market, there exists perfect and free competition in the market. The firm acts as a price taker, while the price is determined by the 'invisible hands of market', i.e. by demand for and supply of the commodities. If an individual firm raises its price, then it will lose all its buyers to other firms and vice-versa. Thus, firms have no role to play other than supplying the required output at the existing market price and therefore a firm is a price taker and not a price maker.

### Question 8

The price of a commodity increases from ₹ 10 to ₹ 14. Calculate percentage fall in quantity demanded of the commodity if coefficient of price elasticity of demand is (-) 1.25.

OR

State whether the following statements are *true* or *false*. Give valid reasons in support of your answer.

- (a) The coefficient of price elasticity of demand for the commodity is inversely related to the number of alternative uses of the commodity.
- (b) Luxury goods often have lower price elasticity of demand.

### SOLUTION:

Given:

$$P_1 = 10$$

$$P_2 = 14$$

$$\text{Price Elasticity of Demand} = 1.25$$

$$\text{Percentage fall in quantity demanded} = ?$$

$$\text{Percentage rise in price} = \frac{P_2 - P_1}{P_1} \times 100 = \frac{14 - 10}{10} \times 100 = 40\%$$

$$\text{Elasticity of Demand} = \frac{\text{Percentage fall in quantity demanded}}{\text{Percentage in price}}$$

$$(-) 1.25 = \frac{\text{Percentage fall in Quantity Demanded}}{40\%}$$

$$\text{Percentage Change in Quantity Demanded} = 1.25 \times 40\% = 50\%$$

OR

a. The statement 'The coefficient of price elasticity of demand for the commodity is inversely related to the number of alternative uses of the commodity' is **false**. A commodity that can be used for different purposes (such as milk) will have

elastic demand. This is because if the price of this commodity increases, then it will be used only for important purposes leading to a drastic fall in demand. Thus, the demand for such goods is highly responsive to price. On the contrary, a good that has limited usage will have an inelastic demand.

**b. The statement 'Luxury Goods often have lower price elasticity of demand' is false.** Luxuries are the goods which are not essential, rather, are consumed for leisure or comfort purposes. For example, air conditioner, branded garments, etc. The demand for such goods is highly responsive to changes in their prices. A rise in the price reduces the demand for them and vice-versa. Thus, such goods have high price elasticity.

### Question 9

With the help of the given schedule, determine the firm's equilibrium using marginal revenue – marginal cost approach. Give valid reasons in support of your answer.

Output (in units)	Total revenue (TR) (in ₹)	Total Cost (TC) (in ₹)
1	20	20
2	40	30
3	60	36
4	80	40
5	100	60
6	120	90

### SOLUTION:

Output (in units)	Total revenue (TR) (in ₹)	Total Cost (TC) (in ₹)	Marginal Revenue (in ₹)	Marginal Cost (in ₹)
1	20	20	-	-
2	40	30	20	10
3	60	36	20	6
4	80	40	20	4
<b>5</b>	<b>100</b>	<b>60</b>	<b>20</b>	<b>20</b>
6	120	90	20	30

According to MR-MC approach, the firm (or producer) will attain its equilibrium, where the following two necessary and sufficient conditions are fulfilled.

1. Necessary Condition or First-Order Condition (FOC)

$$MR = MC$$

or,

$$\frac{d(TR)}{dx} = \frac{d(TC)}{dx}$$

where we are differentiating TR and TC with respect to the output (x).

2. Sufficient Condition or Second Order Condition (SOC)

MC curve is rising and cuts MR curve from below

Slope of MC > 0

$$\therefore \frac{d(MC)}{dx} > 0$$

This implies that the slope of the MC curve should be positive at the point of intersection with the MR curve.

Producer's equilibrium is struck when output level is 5 units. This is because at the output level of 5, both MR and MC are equal, which is equal to 20. And also, MC is rising at this level.

### Question 10

(a) Identify the market form and explain the corresponding feature, as given in the following statement:

"The commodity in this market has attributes which are identical for sellers and buyers."

(b) Define Price Floor. State the likely consequence of this type of intervention by the government.

### SOLUTION:

(a) The market referred here "The commodity in this market has attributes which are identical for sellers and buyers" is Perfect Competition.

This implies that all the firms in perfect competitive market produces homogeneous product. This further implies that the product of each and every firm in the market is perfect substitute to others' product in terms of quantity, quality, colour, size, features, etc. This indicates that the buyers are indifferent between the products of different firms. Due to the homogeneity of the products, existence of uniform price is guaranteed.

(b) Price floor implies legislated or government fixed minimum price that should be charged by the seller. The minimum price is fixed above the equilibrium price. The likely consequences of this type of intervention by the government are:

**Assurance to the Farmers-** The imposition of the price floor assures the farmers that whatever they produce will get sold in the market. This implies that the farmers can produce to their maximum.

**Assurance of Returns-** Due to the price floor, the farmers need not to bother about the sale of their output. This ensures a minimum guaranteed return to their investment in the production process.

### Question 11

Suppose a consumer whose budget is ₹ 500, wants to consume only two goods, Good X and Good Y. The goods are respectively priced at ₹ 50 and ₹ 25.

Answer the following questions on the basis of the given information:

- (a) State the budget equation of the consumer.
- (b) What is the slope of the budget line?
- (c) How many units can she purchase if she spends the entire ₹ 500 on Good X?
- (d) How many units can she purchase if she spends the entire ₹ 500 on Good Y, given that the price of good Y has doubled?

**OR**

"For a consumer to be in equilibrium position, marginal rate of substitution between the two goods must be equal to ratio of prices of the two goods." Do you agree with the given statement? Justify your answer.

### SOLUTION:

Given:

Budget or Income (M)= ₹500

Price of Good X ( $P_x$ ) = ₹50

Price of Good Y ( $P_y$ ) = ₹ 25

(a) The budget equation of the consumer:

$$P_x \cdot X + P_y \cdot Y = M$$

Putting all the values in the given equation:

$$50X + 25Y = 500 \text{ (Budget Equation)}$$

(b) The slope of the budget line is  $-\frac{P_x}{P_y} = -\frac{50}{25} = -2$

(c) Units of Good X when entire income is spent on Good X implies that  $Y = 0$ . Putting the values in the budget equation we get,

$$50X + 25(0) = 500$$

$$50X = 500$$

$$X = 10 \text{ units}$$

(d) Units of Good Y when entire income is spent on Good Y implies that  $X = 0$  and also  $P_y$  has doubled implies that  $P_y = ₹50$ . Putting all the values in the budget equation we get,

$$50(0) + 50(Y) = 500$$



$$50Y = 500$$

$$Y = 10 \text{ units}$$

**OR**

Yes, we agree with the statement that "For a consumer to be in equilibrium position, marginal rate of substitution between the two goods must be equal to ratio of prices of the two goods".

A consumer always aims at maximising his/her utility or satisfaction level. A rational consumer, with well-defined preferences, will always choose the best bundle among all the bundles available to him, given his/her money income and the prices of the goods and services. In other words, a consumer always tries to attain the highest possible IC given his/her budget set.

The consumption bundles that lie below the budget line leave the consumer with some unspent income. As compared to this the consumption bundles that lie on the budget line will have more of at least one of the goods and no less of the other. In other words, the consumption bundles that lie on the budget line will be more preferred than those that lie below the budget line. As against this, the consumption bundles that lie above the budget line are unaffordable (i.e. the consumer cannot purchase those bundles with his given money income).

From this analysis, it can be inferred that the optimum bundle for the consumer must lie on the budget line.

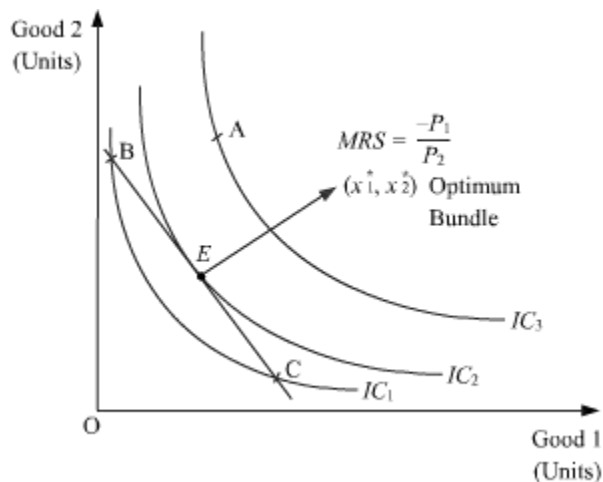
A consumer attains equilibrium at the point where the budget line is tangent to the indifference curve. This optimum point is characterised by the following equality.

Slope of the IC = Slope of the budget line

$$\left| \frac{-dy}{dx} \right| = |MRS| = \left| \frac{-P_1}{P_2} \right|$$

Absolute value of the slope of the IC = Absolute value of the slope of the budget line

Graphically, the equilibrium can be depicted as follows.

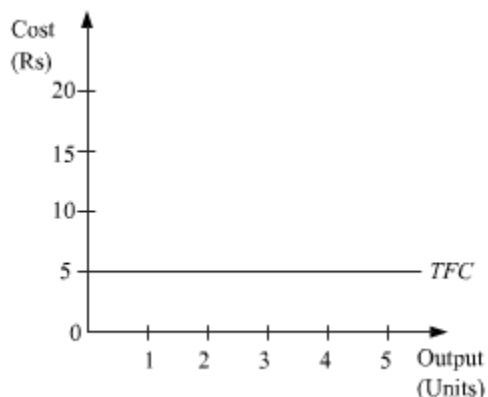


### Question 12

- (a) Why is the Total Fixed Cost curve parallel to the horizontal axis (x-axis)?
- (b) Explain the relation between Average Variable Cost (AVC) curve and Marginal Cost (MC) curve. Use diagram

### SOLUTION:

(a) Total Fixed Costs refer to those costs which are incurred by a firm in order to acquire the services of the fixed factors for production. In the short run, fixed factors cannot be varied and accordingly the fixed costs remain the same (constant) throughout all output levels. Therefore in the short run, TFC is a horizontal curve parallel to the x-axis as given in the figure.

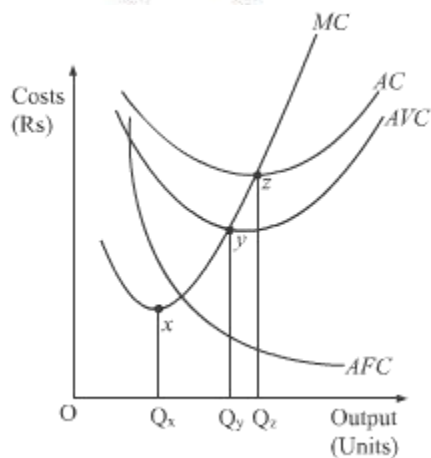


- (b) 1. When AVC is falling up to point y, MC falls at a faster rate up to point x and stays below AVC curve.
2. When AVC is rising after point y, MC rises at a faster rate after point x and remains above AVC curve.
3. When AVC is at minimum point (i.e at point y), MC is equal to AVC.
4. MC curve cuts the AVC curve at its minimum point at y.
5. The minimum point of MC curve (x) will always lie left to the minimum point of AVC curve (y).

6. AVC and MC both are derived from TVC.

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

$$MC = \frac{\Delta TC}{\Delta Q} = \frac{\Delta TVC}{\Delta Q}$$



### Question 13

State any two examples of non-tax revenue receipts of the government.

**OR**

Dividends received from Public Sector Undertakings (PSUs) are a part of the government's \_\_\_\_\_. (Choose the correct alternative)

- (a) Non-tax Revenue Receipts
- (b) Tax Receipts
- (c) Capital Receipts
- (d) Capital Expenditure

### SOLUTION:

Non-tax revenue receipts of the government are:

1. Fees and Licenses
2. Fines and Penalties

**OR**

Dividends received from Public Sector Undertakings (PSUs) are a part of the government's non-tax revenue receipts.

Hence, the correct answer is option (A).

### Question 14

Suppose you are a member of the "Advisory Committee to the Finance Minister of India". The Finance Minister is concerned about the rising Revenue Deficit in the budget.

Suggest any one measure to control the rising Revenue Deficit of the government.

#### SOLUTION:

The measure that can be used to control the rising Revenue Deficit is that the government should either cut down its revenue expenditure or increase its revenue receipts.

#### Question 15

Define "demand deposits".

#### SOLUTION:

The Demand Deposits are the deposits that are payable on demand or on call. In other words, such deposits can be withdrawn by the depositor as and when required. Since demand deposits are always available on demand, they are chequable deposits i.e. cheques can be issued against such deposits.

#### Question 16

State the role played by the central bank as the "lender of last resort".

#### SOLUTION:

As the lender of last resort, the central bank is under the obligation to provide funds against securities to the commercial bank as and when needed by them. When a commercial bank faces a financial crisis and fails to obtain funds from other sources, then the central bank plays the vital role of 'lender of last resort' and provides them with the financial assistance in the form of credit. This role of the central bank saves the commercial bank from being bankrupt. Thus, the central bank plays the role of guarantor for the commercial banks and maintains a sound and healthy banking system in the economy.

#### Question 17

The consumption function of an economy is :  $C = 40 + 0.8 Y$  (amount in ₹ crores). Determine that level of income where average propensity to consume will be one.

**OR**

Which of the two, average propensity to consume or average propensity to save, can be negative and why?

### SOLUTION:

Given:

$$C = 40 + 0.8 Y$$

$$APC = 1$$

$$APC = \frac{Y}{C} = 1$$

$$\Rightarrow Y = C$$

Putting the value of C in consumption function given above, we get

$$Y = 40 + 0.8 Y$$

Solving for Y we get,

$$Y = 200$$

So, the level of income is ₹ 200 crores.

OR

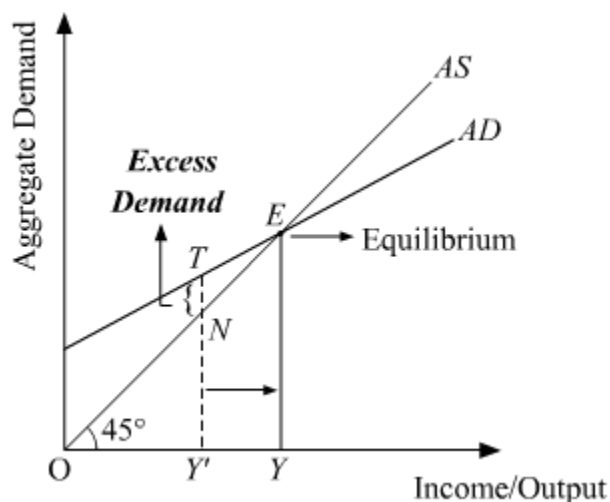
Average Propensity to Save can be negative. It is negative in the situation when savings are negative or when consumption is greater than income (When past savings are used for consumption). Average Propensity to Consume can never be negative because is the ratio of consumption and income and consumption can never be negative.

### Question 18

Describe the adjustments that may take place in an economy when ex-ante Aggregate Demand is greater than ex-ante Aggregate Supply.

### SOLUTION:

In case, if  $AD > AS$ , then it implies a situation, where the total demand for goods and services is more than the total supply of the goods and services. This implies a situation of excess demand. Due to the excess demand, the producers draw down their inventory and increase production. The increase in production requires hiring more factors of production, thereby increases employment level and income. Finally, the income will rise sufficiently to equate the AD with AS, thus the equilibrium is restored back. This process of adjustment mechanism is explained below graphically.



In the figure, AD and AS represent the aggregate demand and aggregate supply curves. Let us suppose that the equilibrium is operating at a situation, where aggregate demand exceeds aggregate supply, i.e.  $AD > AS$ .  $TY'$  represents the aggregate demand of output by the economy but the aggregate supply is only of  $NY'$ . Hence, the economy is facing excess demand equivalent to  $TN$  (i.e.  $TY' - NY'$ ). Due to the excess demand, the producers draw down their inventories and hire more factors of production. This results in an increase in production and employment. The income, output and employment will continue to rise until all the excess demand is wiped-out. This happens at equilibrium point E, where AD and AS intersect each other. At the equilibrium, OY represents the equilibrium level of output.

### Question 19

Explain, using a numerical example, how a reduction in reserve deposit ratio, affects the credit creation power of the banking system.

### SOLUTION:

Reserve Deposit Ratio or Cash Reserve Ratio refers to the minimum proportion of the total deposits that the commercial banks have to maintain with the central bank in the form of reserves.

An increase in this ratio, would mean that banks would be required to keep a greater portion in the form of deposits with the central bank. This implies that commercial banks are left with a lesser amount of funds to lend out. Hence, the lending capacity of the banks reduces, leading to fall in the money supply. On the contrary, a fall in CRR will lead to an increase in the money supply.

To summarise,

$CRR \uparrow \Rightarrow \text{Deposits with the banks} \downarrow \Rightarrow \text{cash reserves of the bank} \downarrow \Rightarrow \text{Lending capacity of banks} \downarrow \Rightarrow \text{Money supply} \downarrow$

$CRR \downarrow \Rightarrow \text{Deposits with the banks} \uparrow \Rightarrow \text{cash reserves of the bank} \uparrow \Rightarrow \text{Lending capacity of banks} \uparrow \Rightarrow \text{Money supply} \uparrow$

A depositor deposits Rs.10,000 in his savings account, which will become the demand deposit of the bank. Based on the assumption that not all customers will turn up at the same day to withdraw their deposits, the bank maintains a minimum cash reserve of 10 % of the demand deposits, i.e. Rs.1000. It lends the remaining amount of Rs.9000 in the form of credit to other customers. This further creates deposits for the bank XYZ of Rs 9000. Now in the next round, out of Rs 9000, Rs 900 goes as cash reserves and the remaining Rs 8100 are extended as loans. And so the process will continue. Such a process will increase the money supply in the economy by the amount (times) of credit multiplier.

Suppose the reserve deposit ratio or cash reserve ratio is equal to 10%. Then:  
Credit multiplier =  $1/CRR = 1/10\% = 10$

Therefore, the money supply will increase by 10 times and the total credit created in the economy will be equal to around Rs 1,00,000.

The process can be supported by the following table:

<b>Rounds</b>	<b>Deposits Received <i>A</i></b>	<b>Loans Extended <i>B</i></b>	<b>Cash Reserves</b>
Initial	10,000	9000	1000
Round I	9000	8100	900
Round II	8100	7290	810
Round III	-	-	-
Round IV	-	-	-
.	-	-	-
.	-	-	-
Round <i>N</i>	-	-	-
<b>Total</b>	<b>1,00,000</b>	<b>90,000</b>	<b>10,000</b>

Now suppose the CRR reduces to 5%. Then:

Credit multiplier =  $1/\text{CRR} = 1/5\% = 20$

Therefore, the money supply will increase by 20 times and the total credit created in the economy will be equal to around Rs 2,00,000.

<b>Rounds</b>	<b>Deposits Received <i>A</i></b>	<b>Loans Extended <i>B</i></b>	<b>Cash Reserves</b>
Initial	10,000	9,500	500
Round I	9,500	9,025	475
Round II	9,025	8573.75	451.25
Round III	-	-	-
Round IV	-	-	-
.	-	-	-
.	-	-	-
Round <i>N</i>	-	-	-
<b>Total</b>	<b>2,00,000</b>	<b>1,90,000</b>	<b>10,000</b>

**With the fall in Reserve Deposit Ratio or CRR, the money supply increases in the economy.**

### Question 20

Explain how the government can use the budgetary policy in reducing inequality of income in the economy.

**OR**

Discuss briefly the role of the government budget in influencing "allocation of resources" in the economy.

**SOLUTION:**

The government through its budgetary policy attempts to promote fair and right distribution of income in an economy. This is done through taxation and expenditure policy. On one hand, through its taxation policy, the government taxes the higher income group and on the other hand, through the expenditure policy (subsidies, transfer payments, etc.), it transfers the purchasing power in the hands of the poor sections of society. With the help of these policies, the government aims at fair distribution of income in the society.

**OR**

This objective of government is related to the allocation of resources to different areas. In a mixed economy, the private producers aim towards profit maximisation, while, the government aims towards welfare maximisation. The private sector always tends to divert resources towards areas of high profit, while, ignoring areas of social welfare. In such a situation, the government through its budgetary policy reallocates resources to maintain a balance between the social objectives of welfare maximisation and economic objective of profit maximisation. For example- government levies taxes on socially harmful goods such as tobacco, etc. and provides subsidies for socially desirable goods such as food grains, kerosene, etc.

**Question 21**

How is Real Gross Domestic Product (GDP) different from Nominal Gross Domestic Product (GDP)? Explain using a numerical example.

**SOLUTION:**

The difference between Real Gross Domestic Product and Nominal Gross Domestic Product is given as follows:

<b>Basis</b>	<b>Real GDP</b>	<b>Nominal GDP</b>
Definition	1. Real GDP refers to the total market value of the output at the base year prices.	1. Nominal GDP refers to the total market value of the output at the current year prices.
Change	2. The value of Real GDP can change only when the volume/quantity of output changes over time.	2. The value of Nominal GDP can change only with a change in the prices over time.



Index of Social Welfare	3. It can be treated as an index of economic growth i.e. higher Real GDP implies higher economic growth.	3. It cannot be treated as an index of economic growth i.e. higher Nominal GDP does not imply higher economic growth, in fact, it indicates inflation.
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Consider a hypothetical economy that produces only a single commodity *x*. Suppose, in the year 2000, 100 units of the commodity *x* were produced and the current year price is Rs 10 and the base year price was Rs. 5.

Commodity	Quantity A	Current Year Price B	Base Year Price C	Nominal GDP Quantity × Current Year Prices (A×B)	Real GDP Quantity × Base Year Prices (A×C)
X	100	10	5	1,000	500

### Question 22

(a) State any two factors responsible for inflow of foreign currency.

(b) State on which side of capital account/current account will the following transactions be recorded and why:

- (i) Interest on loan received from Nepal
- (ii) Import of mobile phones from China

**OR**

(a) Distinguish between Autonomous and Accommodating transactions of Balance of Payments account.

(b) Distinguish between depreciation of a currency and devaluation of a currency.

### SOLUTION:

(a) Factors which are responsible for inflow of foreign currency are:

1. A country receives foreign exchange from various receipts in the economic transactions such as a receipt from exports of the domestic country to rest of the world, receipt of remittances from abroad, FDI and purchase of financial assets in the domestic country.

2. The foreign exchange flows in the country due to speculative activities.

(b) (i) Interest on loan received from Nepal: It is recorded as a positive item in the Capital Account of the BOP, as it results in an inflow of the foreign exchange into a country.

(ii) Import of mobile phones from China: It is recorded as negative items in the Current Account of the BOP, as it results in an outflow of the foreign exchange from the country.

**OR**

(a) The difference between Autonomous and Accommodating transactions of Balance of Payments account is given as follows:

Basis	Autonomous Transactions	Accommodating Transactions
Definition	Autonomous items refer to those international economic transactions that are undertaken with the sole motive of earning profit.	Accommodating items refers to those international economic transactions that are not undertaken with the motive of earning profit such as government financing, injection or withdrawal from the official reserves.
Another name	Autonomous transactions are also called 'above the line items' in BOP.	Accommodating items are also called 'below the line items' in BOP.

(b) The difference between the depreciation of currency and devaluation of currency is given as follows:

Basis	Depreciation	Devaluation
Definition	Currency depreciation implies that domestic currency has become less expensive in terms of foreign currency.	Devaluation of a currency occurs when the currency exchange rate is officially lowered by the monetary authority.
Exchange rate system	This is possible in a flexible exchange rate system	This is possible in a fixed exchange rate system

### Question 23

(a) Define net exports. How is it different from net factor income from abroad?

(b) Calculate value of "Interest" from the following data:

S. No.	Particulars	Amount (₹ in crores)
(i)	Indirect tax	1,500
(ii)	Subsidies	700
(iii)	Profits	1,100
(iv)	Consumption of fixed capital	700
(v)	Gross domestic product at market price	17,500
(vi)	Compensation of employees	9,300
(vii)	Interest	?

(viii)	Mixed income of self-employed	3,500
(ix)	Rent	800

### SOLUTION:

Net exports refer to the difference between the total exports and total imports of a country during an accounting year.

Net Exports = (Value of Exports – Value of Imports)

*NFIA* serves as the basis of the distinction between the National Income and the Domestic Income.

National Income = Domestic Income + *NFIA*

i.e.  $NNP_{FC} = NDP_{FC} + NFIA$

Net Exports is equal to the value of exports minus value of imports whereas *NFIA* is equal to Factor Income Earned from Foreign minus Factor Income Paid to the Foreigners

(b) Given

$GDP_{MP} = 17,500$

$NDP_{FC} = GDP_{MP} - \text{Consumption of fixed capital} - NIT$

$NDP_{FC} = 17,500 - 700 - (\text{Indirect Tax} - \text{Subsidies})$

$NDP_{FC} = 17,500 - 700 - (15,00 - 700)$

$NDP_{FC} = 16,000$

$NDP_{FC} = \text{Compensation of Employees} + \text{Operating Surplus} + \text{Mixed Income of Self-Employed}$

$NDP_{FC} = \text{Compensation of Employees} + \text{Rent} + \text{Interest} + \text{Profits} + \text{Mixed Income of Self-Employed}$

$16,000 = 9,300 + 800 + \text{Interest} + 1,100 + 3,500$

Interest = 1,300

### Question 24

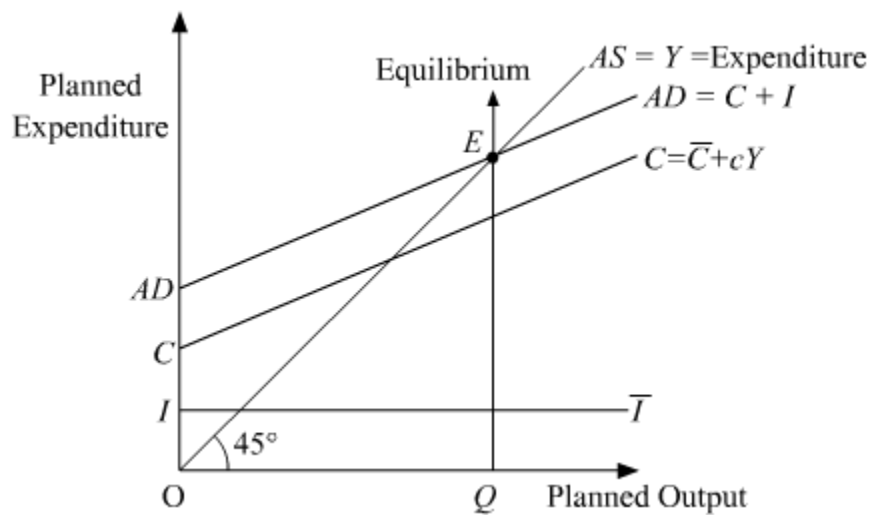
What is meant by the "Effective Demand Principle" in Keynesian theory of employment? Discuss using a schedule or a diagram.

### SOLUTION:

Effective Demand Principle refers to a situation in which the equilibrium output is determined solely by the level of aggregate demand. If there exists any inequality between AD and AS, then equilibrium output is influenced only by AD and AS has to be adjusted in such a way that it equals AD.

According to the AD-AS approach, the equilibrium level of income is determined at that point, where Aggregate Demand (AD) is equal to Aggregate Supply (AS). It should be

noted that here AD refers to the planned/desired level of expenditure in the economy during an accounting year. Similarly, refers to the planned/desired level of output in an economy during an accounting year.



In the diagram, the consumption curve is depicted by  $C$  and the investment curve is depicted by the horizontal straight line parallel to the output/income axis. Summing-up the investment curve and consumption curve we get the Aggregate Demand curve represented by  $AD = C + I$ . The Aggregate Supply curve is represented by the  $45^\circ$  line. Throughout this line, the planned expenditure is equal to the planned output. That is  $AS = Y = \text{Expenditure}$ . The implication of  $45^\circ$  line is that in case of any disequilibrium, AS will be adjusted in a way to equate AD in order to restore equilibrium back. That is in other words, in case of any inequality between AD and AS, equilibrium output will be determined by AD.

he point E is the equilibrium point, where the planned level of expenditure (AD) is equal to the planned level of output (AS). In other words, this suggests that there is no undesired inventory accumulation. The equilibrium level of output is OQ, which is also known as the 'effective demand'