

UP Board Class 12 Economics - 329(JK) - 2025 Question Paper with Solutions

Time Allowed :3 Hours	Maximum Marks :100	Total Questions :27
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General Instructions

Read the following instructions very carefully and strictly follow them:

1. First 15 minutes are allotted for the candidates to read the question paper.
2. All questions are compulsory.
3. Question Numbers 1 to 10 are Multiple Choice Type for which only correct answer should be written in the answer-book.
4. Question Numbers 11 to 18 are Very Short Answer Type, which are to be answered in about 50 words each.
5. Question Numbers 19 to 24 are Short Answer Type, which are to be answered in about 150 words each and Question Numbers 25 to 27 are Long Answer Type, which are to be answered in about 300 words each.
6. The symbols used in question paper have usual meanings.

Multiple Choice Type Questions

1. Who is called the father of Economics?

- (A) Adam Smith
- (B) Marshall
- (C) Robbins
- (D) Mehta

Correct Answer: (A) Adam Smith

Solution:

Step 1: Understanding the Concept:

The question asks to identify the historical figure widely recognized as the "father of Economics."

Step 2: Detailed Explanation:

Adam Smith, a Scottish economist and philosopher, is universally regarded as the father of modern economics. His monumental work, "*An Inquiry into the Nature and Causes of the Wealth of Nations*" (1776), laid the foundation for classical economics and established economics as a distinct academic discipline. He introduced foundational concepts like the division

of labor, free markets, and the "invisible hand."

Step 3: Final Answer:

Adam Smith is called the father of Economics. Therefore, option (A) is the correct answer.

Quick Tip

Remember Adam Smith's book "The Wealth of Nations" (1776) as the starting point of modern economic thought.

2. "What ought to be?" is a subject matter of

- (A) Positive Economics
- (B) Normative Economics
- (C) Both (A) and (B)
- (D) None of these

Correct Answer: (B) Normative Economics

Solution:

Step 1: Understanding the Concept:

Economics is divided into two main branches based on the nature of its statements: Positive and Normative Economics.

Step 2: Detailed Explanation:

- **Positive Economics** deals with objective, factual statements about "what is." These statements can be tested and verified with data.
- **Normative Economics** deals with subjective statements and value judgments about "what ought to be" or "what should be." These statements are prescriptive, express opinions, and cannot be proven true or false. An example is, "The government should increase the minimum wage."

The question "What ought to be?" directly reflects the prescriptive and value-based nature of Normative Economics.

Step 3: Final Answer:

The subject matter of "What ought to be?" is Normative Economics. Therefore, option (B) is correct.

Quick Tip

Positive economics is descriptive (*is*), while normative economics is prescriptive (*ought to be*).

3. In how many categories are the factors of production broadly divided?

- (A) 2
- (B) 3
- (C) 4
- (D) 5

Correct Answer: (C) 4

Solution:

Step 1: Understanding the Concept:

Factors of production are the inputs or resources used to create goods and services.

Step 2: Detailed Explanation:

Classical and neoclassical economics broadly divide the factors of production into **four** main categories:

1. **Land:** All natural resources.
2. **Labor:** Human effort.
3. **Capital:** Man-made goods used in further production (e.g., machinery, tools).
4. **Entrepreneurship:** The skill of combining the other three factors to produce goods and services and take risks.

Step 3: Final Answer:

The factors of production are broadly divided into four categories. Thus, option (C) is the correct answer.

Quick Tip

Use the acronym **CELL** (Capital, Entrepreneurship, Land, Labor) to remember the four factors of production.

4. If the demand curve is parallel to the x-axis, then elasticity of demand is

- (A) infinite
- (B) one

- (C) less than one
- (D) more than one

Correct Answer: (A) infinite

Solution:

Step 1: Understanding the Concept:

A demand curve parallel to the x-axis is a horizontal line. This indicates that consumers are willing to buy an unlimited quantity of a good at a specific price, but if the price increases even slightly, the quantity demanded drops to zero.

Step 2: Detailed Explanation:

This situation represents **perfectly elastic demand**. The formula for price elasticity of demand (E_d) is the percentage change in quantity demanded divided by the percentage change in price. For a horizontal demand curve, a tiny (near-zero) percentage change in price leads to an infinitely large percentage change in quantity demanded. Mathematically, any number divided by zero is infinite. Therefore, the elasticity of demand is **infinite**.

Step 3: Final Answer:

If the demand curve is parallel to the x-axis, the elasticity of demand is infinite. Therefore, option (A) is correct.

Quick Tip

Remember the shapes: A **H**orizontal demand curve has **I**nfinite elasticity (**HI**). A **V**ertical demand curve has **Z**ero elasticity (**VZ**).

5. If the demand curve is parallel to the x-axis, then what type of market will it be?

- (A) Perfect competitive
- (B) Monopolistic
- (C) Oligopoly
- (D) Monopolistic competitive

Correct Answer: (A) Perfect competitive

Solution:

Step 1: Understanding the Concept:

The question links the shape of a firm's demand curve to a specific market structure. A demand curve parallel to the x-axis represents perfectly elastic demand.

Step 2: Detailed Explanation:

A perfectly elastic (horizontal) demand curve is a characteristic of an individual firm in a **perfectly competitive market**. In this market, there are many firms selling a homogeneous product. Each firm is a "price-taker" and has no control over the market price. The firm can sell as much as it wants at the prevailing market price, but if it raises its price even slightly, its sales will drop to zero because buyers can purchase the identical product from numerous other sellers. This is why its demand curve is perfectly elastic.

Step 3: Final Answer:

A horizontal demand curve is characteristic of a firm in a perfect competitive market. Therefore, option (A) is the correct answer.

Quick Tip

It is crucial to distinguish between the *market* demand curve (which is downward sloping even in perfect competition) and the *individual firm's* demand curve (which is horizontal).

6. Where is the headquarters of the Reserve Bank of India?

- (A) Delhi
- (B) Mumbai
- (C) Kolkata
- (D) Chennai

Correct Answer: (B) Mumbai

Solution:**Step 1: Understanding the Concept:**

The question asks for the location of the headquarters of the Reserve Bank of India (RBI), which is India's central bank.

Step 2: Detailed Explanation:

The Reserve Bank of India was established on April 1, 1935. Its central office was initially established in Calcutta (now Kolkata) but was permanently moved to **Mumbai** in 1937. The RBI Governor's office is located here, and major policy decisions are formulated in the Mumbai headquarters.

Step 3: Final Answer:

The headquarters of the Reserve Bank of India is in Mumbai. Therefore, option (B) is the correct answer.

Quick Tip

Mumbai is known as the financial capital of India, and appropriately, it is home to the headquarters of the central bank (RBI) and major stock exchanges.

7. Who presented the Central Budget on 23rd July, 2024?

- (A) Narendra Modi
- (B) Nirmala Sitharaman
- (C) Yogi Adityanath
- (D) Amit Shah

Correct Answer: (B) Nirmala Sitharaman

Solution:

Step 1: Understanding the Concept:

The question asks to identify the person who presented the Union Budget on a specific date. The Union Budget is presented by the Finance Minister of India.

Step 2: Detailed Explanation:

Following the 2024 Indian general elections and the formation of the new government, the full Union Budget for the fiscal year 2024-25 was presented on **July 23, 2024**. The budget was presented by the incumbent Finance Minister, **Nirmala Sitharaman**. This was her seventh consecutive budget presentation.

Step 3: Final Answer:

The Central Budget on July 23rd, 2024 was presented by Finance Minister Nirmala Sitharaman. Therefore, option (B) is the correct answer.

Quick Tip

The Union Budget is a key annual event. Always keep track of the current Finance Minister and the date of the budget presentation for general knowledge questions.

8. If the value of marginal propensity to consume is 0.8, what will be the value of marginal propensity to save?

- (A) 1.8
- (B) 1.0
- (C) 0.2

(D) Zero

Correct Answer: (C) 0.2

Solution:

Step 1: Understanding the Concept:

This question relates to the fundamental relationship between the Marginal Propensity to Consume (MPC) and the Marginal Propensity to Save (MPS). Any additional income (ΔY) is either consumed (ΔC) or saved (ΔS).

Step 2: Key Formula or Approach:

The relationship between MPC and MPS is given by the equation:

$$\text{MPC} + \text{MPS} = 1$$

Step 3: Detailed Explanation:

We are given the value of MPC:

$$\text{MPC} = 0.8$$

Substituting this value into the formula:

$$0.8 + \text{MPS} = 1$$

To find MPS, we rearrange the equation:

$$\text{MPS} = 1 - 0.8$$

$$\text{MPS} = 0.2$$

Step 4: Final Answer:

If the marginal propensity to consume is 0.8, the marginal propensity to save is **0.2**. Therefore, option (C) is the correct answer.

Quick Tip

Think of an extra rupee of income. If 80 paise (0.8) is consumed (MPC), the remaining 20 paise (0.2) must be saved (MPS). The two parts always add up to one.

9. Keynes is associated with

- (A) Micro-Economics
- (B) Macro-Economics
- (C) Both (A) and (B)
- (D) None of these

Correct Answer: (B) Macro-Economics

Solution:

Step 1: Understanding the Concept:

The question asks to associate the economist John Maynard Keynes with the appropriate branch of economics.

Step 2: Detailed Explanation:

John Maynard Keynes is widely regarded as the father of modern **Macroeconomics**. His seminal work, "The General Theory of Employment, Interest and Money" (1936), revolutionized economic thought by focusing on aggregate variables like aggregate demand, national income, and unemployment. He argued for active government intervention to manage the economy, a central theme of macroeconomics.

Step 3: Final Answer:

Keynes is associated with Macro-Economics. Therefore, option (B) is correct.

Quick Tip

Remember: Adam Smith is the father of Economics in general (with a micro focus on markets), while John Maynard Keynes is the father of modern Macroeconomics.

10. Study of National Income is related to

- (A) Micro-Economics
- (B) Macro-Economics
- (C) Both (A) and (B)
- (D) None of these

Correct Answer: (B) Macro-Economics

Solution:

Step 1: Understanding the Concept:

The question asks to classify the study of National Income into one of the main branches of economics.

Step 2: Detailed Explanation:

National Income is the total income earned by the factors of production in a country over a year. It is an aggregate variable that measures the economic performance of the entire nation. **Macroeconomics** is the branch of economics that studies the economy as a whole, focusing on aggregate variables like national income, aggregate demand, unemployment, and inflation. Therefore, the study of national income is a central topic in Macroeconomics.

Step 3: Final Answer:

The study of National Income is related to Macro-Economics. Therefore, option (B) is the correct answer.

Quick Tip

If an economic concept has the word "National" or "Aggregate" in it, it's almost certainly a topic in Macroeconomics.

Very Short Answer Type Questions

11. What is "Micro-Economics"?**Solution:****Step 1: Understanding the Concept:**

The question asks for the definition of Microeconomics, one of the two main branches of economics. The prefix 'micro' is derived from the Greek word 'mikros', which means small.

Step 2: Detailed Explanation:

Microeconomics is the branch of economics that studies the behavior and decision-making of individual economic units, such as individual consumers, households, firms, and industries. It focuses on how these individual units make choices regarding the allocation of scarce resources. The key areas of study in microeconomics include:

- The theory of consumer demand.
- The theory of production and cost.
- The determination of prices for individual goods and services.
- The determination of prices for factors of production (wages, rent, interest).
- Market structures (e.g., perfect competition, monopoly).

Step 3: Final Answer:

Microeconomics is the study of the economic actions of individuals and small groups of individuals, focusing on how prices are determined and how resources are allocated.

Quick Tip

Remember the key distinction: **Microeconomics** looks at the individual **trees** (consumers, firms), while **Macroeconomics** looks at the entire **forest** (the economy as a whole).

12. What do you mean by "Utility"?

Solution:

Step 1: Understanding the Concept:

The question asks for the definition of utility, a fundamental concept in the theory of consumer behavior.

Step 2: Detailed Explanation:

In economics, **Utility** refers to the want-satisfying power of a commodity or a service. It is the amount of satisfaction, pleasure, or benefit that a consumer derives from the consumption of a good.

Key characteristics of utility are:

[noitemsep]**It is subjective:** Utility varies from person to person, place to place, and time to time. A cup of coffee may provide high utility to one person but none to another. **It is not the same as usefulness:** A commodity may have utility but may not be useful. For example, cigarettes have utility for a smoker but are harmful to health. **It is ethically neutral:** The concept of utility does not involve any moral or ethical judgments.

Economists use this concept to explain how consumers make choices to maximize their satisfaction.

Step 3: Final Answer:

Utility is the capacity of a good or service to satisfy a human want. It is the measure of satisfaction a consumer receives from consuming a product.

Quick Tip

Think of utility as the "satisfaction score" you mentally give to a product when you use it.

13. What does "Cost" mean?

Solution:

Step 1: Understanding the Concept:

The question asks for the economic meaning of "cost," which is a central concept for firms in the theory of production.

Step 2: Detailed Explanation:

In economics, **Cost** refers to the total expenditure incurred by a firm in producing a good or service. It includes all the payments made to the factors of production (land, labor, capital,

entrepreneurship) and for the purchase of non-factor inputs (like raw materials). Economic cost is a broader concept than accounting cost and includes:

- **Explicit Costs:** These are the direct, out-of-pocket payments made by a firm to others for resources, such as wages, rent, and cost of materials.
- **Implicit Costs:** These are the imputed or opportunity costs of using the firm's self-owned, self-employed resources. For example, the salary the owner could have earned by working elsewhere.

Total Economic Cost = Explicit Costs + Implicit Costs.

Step 3: Final Answer:

Cost is the total monetary expenditure, both explicit and implicit, incurred by a producer in the process of transforming inputs into outputs.

Quick Tip

Remember that economic cost always includes opportunity cost. It's not just what you pay, but also what you give up.

14. What does "Revenue" mean?

Solution:

Step 1: Understanding the Concept:

The question asks for the definition of revenue, which is the income side of a firm's operations.

Step 2: Detailed Explanation:

In economics, **Revenue** refers to the total amount of money or income that a firm receives from the sale of its products to consumers during a specific period. It is the firm's total earnings or receipts from its business activities.

The main concepts of revenue are:

- **Total Revenue (TR):** The total sales proceeds of a firm ($TR = \text{Price} \times \text{Quantity}$).
- **Average Revenue (AR):** Revenue per unit of output ($AR = TR/Q$), which is always equal to the price.
- **Marginal Revenue (MR):** The additional revenue from selling one more unit of output ($MR_n = TR_n - TR_{n-1}$).

Revenue is a key component in calculating a firm's profit (Profit = Total Revenue - Total Cost).

Step 3: Final Answer:

Revenue is the total income a firm generates from selling its goods or services over a certain

period.

Quick Tip

Don't confuse revenue with profit. Revenue is the total money coming in from sales. Profit is what's left after you subtract all the costs.

15. What is a Bank?

Solution:

Step 1: Understanding the Concept:

The question asks for the definition of a bank, which is a key financial intermediary in any modern economy.

Step 2: Detailed Explanation:

A **Bank** is a licensed financial institution that performs two primary functions:

1. It **accepts deposits** from the public (individuals and businesses) who have surplus funds.
2. It **provides loans and advances** to those who are in need of funds for consumption or investment purposes.

By performing these two functions, a bank acts as an intermediary, channeling funds from savers to borrowers. Besides these core functions, banks also provide a range of other services like fund transfers, cheque collection, foreign exchange services, and locker facilities. They play a crucial role in the creation of credit and the functioning of the payment system in an economy.

Step 3: Final Answer:

A bank is a financial institution that accepts deposits from the public and uses that money to grant loans, thereby facilitating the flow of money in the economy.

Quick Tip

The defining characteristic of a bank is its dual function of both accepting deposits and making loans. An institution that does only one of these is a non-bank financial company (NBFC), not a bank.

16. What do you mean by "Market"?

Solution:

Step 1: Understanding the Concept:

The question asks for the economic definition of a market, which is broader than the common understanding of a physical place.

Step 2: Detailed Explanation:

In economics, a **Market** does not refer to a specific physical place but to a mechanism or an arrangement through which buyers and sellers of a particular good, service, or resource come into contact with one another to determine its price and the quantity to be bought and sold.

The essential features of a market are:

- **A Commodity or Service:** There must be something to be bought and sold.
- **Buyers and Sellers:** There must be at least one buyer and one seller.
- **Contact:** Buyers and sellers must be able to interact, either directly or indirectly (e.g., through the internet, telephone).
- **A Price:** The interaction between buyers and sellers determines the price of the commodity.

Today, markets can be local (a vegetable market), national (the Indian stock market), or global (the market for crude oil).

Step 3: Final Answer:

A market is an arrangement that brings buyers and sellers together to facilitate the exchange of goods and services.

Quick Tip

Remember, a market is a *process*, not a *place*. The stock market or an e-commerce website like Amazon are perfect examples of markets that are not confined to a single physical location.

17. What is meant by "Full Employment"?

Solution:

Step 1: Understanding the Concept:

The question asks for the definition of "Full Employment," a key goal of macroeconomic policy.

Step 2: Detailed Explanation:

Full Employment is a macroeconomic situation in which all available labor resources are being used in the most efficient way possible. It refers to a situation where all those who are **able and willing to work** at the prevailing wage rate are able to find employment.

It is important to note that full employment does **not** mean zero unemployment. Even at

the full employment level, there will always be some amount of natural unemployment, which includes:

[noitemsep]**Frictional Unemployment:** Temporary unemployment as people move between jobs. **Structural Unemployment:** Unemployment due to a mismatch between the skills of workers and the skills required for available jobs.

Therefore, full employment corresponds to a situation where there is no cyclical or deficient-demand unemployment.

Step 3: Final Answer:

Full employment is a state of the economy where all persons who are willing and able to work at the existing wage rate get work, allowing for a natural rate of frictional and structural unemployment.

Quick Tip

Full employment is not 100% employment. It's the highest level of employment an economy can sustain without causing significant inflation.

18. What is "Repo Rate"?

Solution:

Step 1: Understanding the Concept:

The question asks for the definition of Repo Rate, which is a key policy rate used by a country's central bank.

Step 2: Detailed Explanation:

The **Repo Rate** (Repurchase Rate) is the interest rate at which the central bank of a country (e.g., the Reserve Bank of India) lends money to commercial banks to meet their **short-term** funding needs.

This lending is done against the collateral of government securities. The name comes from the "Repurchase Agreement" where the commercial bank agrees to repurchase the same securities from the central bank at a predetermined future date and at a higher price (the difference in price represents the interest).

Purpose: The Repo Rate is a powerful tool of monetary policy used to control inflation and manage liquidity in the economy.

- An **increase** in the repo rate makes borrowing by commercial banks more expensive, which in turn leads to higher lending rates for the public, thus reducing the money supply and curbing inflation.
- A **decrease** in the repo rate makes borrowing cheaper, encouraging lending and boosting economic activity.

Step 3: Final Answer:

The Repo Rate is the rate at which the central bank lends funds to commercial banks for their short-term requirements against the collateral of government securities.

Quick Tip

Remember: **Repo** Rate is for when the RBI **lends**. **Reverse Repo** Rate is for when the RBI **borrow**s from commercial banks.

Short Answer Type Questions

19. Explain various degrees of elasticity of demand diagrammatically.

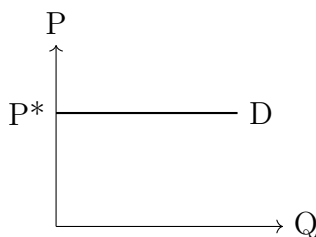
Solution:

Step 1: Understanding the Concept:

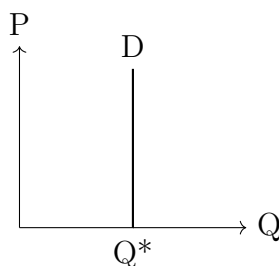
Price elasticity of demand (E_d) measures the degree of responsiveness of the quantity demanded of a good to a change in its price. There are five main degrees of price elasticity.

Step 2: Explanation of Degrees with Diagrams:

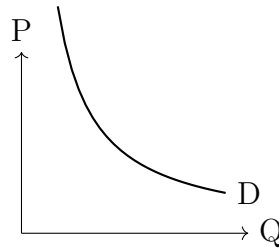
1. **Perfectly Elastic Demand ($E_d = \infty$):** A situation where a small or no change in price leads to an infinite change in quantity demanded. The demand curve is a horizontal line parallel to the X-axis.



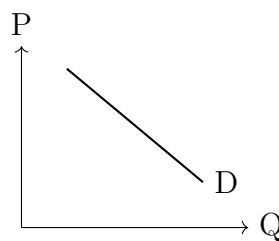
2. **Perfectly Inelastic Demand ($E_d = 0$):** A situation where the quantity demanded does not change at all, irrespective of the change in price. The demand curve is a vertical line parallel to the Y-axis.



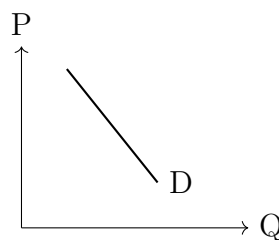
3. **Unitary Elastic Demand ($E_d = 1$):** A situation where the percentage change in quantity demanded is exactly equal to the percentage change in price. The demand curve is a rectangular hyperbola.



4. **Relatively Elastic Demand ($E_d > 1$):** A situation where the percentage change in quantity demanded is greater than the percentage change in price. The demand curve is relatively flat.



5. **Relatively Inelastic Demand ($E_d < 1$):** A situation where the percentage change in quantity demanded is less than the percentage change in price. The demand curve is relatively steep.



Step 3: Final Answer:

The five degrees of elasticity of demand are perfectly elastic ($E_d = \infty$), perfectly inelastic ($E_d = 0$), unitary elastic ($E_d = 1$), relatively elastic ($E_d > 1$), and relatively inelastic ($E_d < 1$), each represented by a demand curve with a distinct shape.

Quick Tip

Remember the shapes: A horizontal line is perfectly elastic (infinite response), and a vertical line is perfectly inelastic (zero response). The flatter the curve, the more elastic the demand.

20. Differentiate between marginal propensity to consume and marginal propensity to save diagrammatically.

Solution:

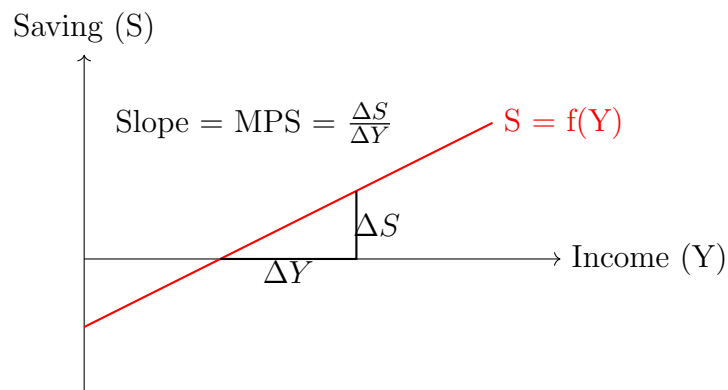
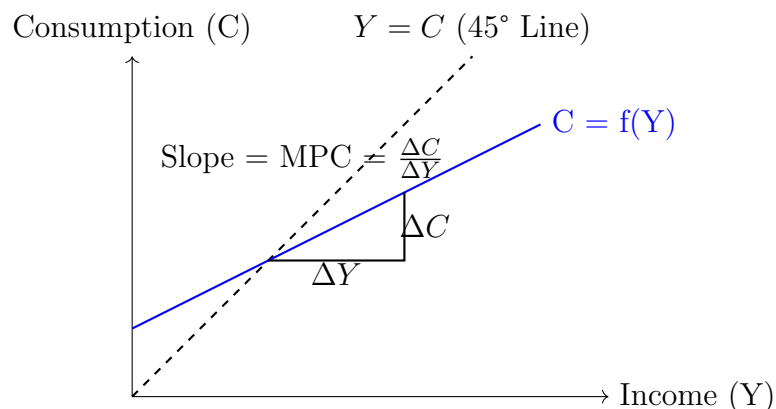
Step 1: Definitions:

- **Marginal Propensity to Consume (MPC):** It is the ratio of the change in consumption expenditure (ΔC) to the change in income (ΔY). It represents the proportion of additional income that is spent on consumption. $MPC = \Delta C / \Delta Y$.
- **Marginal Propensity to Save (MPS):** It is the ratio of the change in saving (ΔS) to the change in income (ΔY). It represents the proportion of additional income that is saved. $MPS = \Delta S / \Delta Y$.

The fundamental relationship is that any additional income is either consumed or saved, so $MPC + MPS = 1$.

Step 2: Diagrammatic Differentiation:

We can show the difference using the consumption curve and the saving curve. MPC is the slope of the consumption curve, and MPS is the slope of the saving curve.



Step 3: Explanation of the Diagram:

- In the upper panel, the consumption curve (C) shows the relationship between income and consumption. The slope of this curve ($\Delta C/\Delta Y$) represents the **MPC**. Since the curve is a straight line, the MPC is constant.
- In the lower panel, the saving curve (S) is derived from the consumption curve. The slope of this curve ($\Delta S/\Delta Y$) represents the **MPS**.
- The slopes of the two curves are different, but their sum is always one. If the consumption curve is steep (high MPC), the saving curve will be relatively flat (low MPS), and vice versa.

Step 4: Final Answer:

MPC and MPS are differentiated by what they measure: the proportion of additional income that is consumed versus saved. Diagrammatically, MPC is the slope of the consumption curve, while MPS is the slope of the saving curve.

Quick Tip

Remember that since $MPC + MPS = 1$, the two values are complements. A high MPC implies a low MPS.

21. Total Revenue of 10 labourers is Rs. 1,000. When 5 labourers are increased their Total Revenue becomes Rs. 1,500. Calculate Marginal Revenue.

Solution:

Step 1: Understanding the Concept:

The question asks to calculate "Marginal Revenue" when the input (labour) is changed. This is more accurately termed the **Marginal Revenue Product of Labour (MRP_L)**. It measures the change in total revenue resulting from employing one additional unit of labor.

Step 2: Key Formula or Approach:

The formula for Marginal Revenue Product of Labour is:

$$MRP_L = \frac{\text{Change in Total Revenue } (\Delta TR)}{\text{Change in Quantity of Labour } (\Delta L)}$$

Step 3: Identifying the Given Values:

- Initial number of labourers (L_1) = 10
- Initial Total Revenue (TR_1) = Rs. 1,000
- Increase in labourers = 5
- New number of labourers (L_2) = $10 + 5 = 15$

- New Total Revenue (TR_2) = Rs. 1,500

Step 4: Calculating the Changes:

- Change in Total Revenue (ΔTR) = $TR_2 - TR_1 = 1,500 - 1,000 = \text{Rs. } 500$
- Change in Quantity of Labour (ΔL) = $L_2 - L_1 = 15 - 10 = 5$ labourers

Step 5: Calculating Marginal Revenue Product:

Substituting the values into the formula:

$$MRP_L = \frac{500}{5} = 100$$

This means that, on average, each of the 5 additional labourers added Rs. 100 to the total revenue.

Step 6: Final Answer:

The Marginal Revenue (or more accurately, the Marginal Revenue Product per labourer) is **Rs. 100**.

Quick Tip

When revenue is given in relation to an input (like labor) instead of output, the concept is Marginal Revenue Product (MRP), not just Marginal Revenue (MR). MRP measures the productivity of an input in monetary terms.

22. Explain credit creation by banks.

Solution:

Step 1: Understanding the Concept:

Credit creation is one of the most important functions of commercial banks. It is the process by which banks multiply an initial deposit into a much larger amount of total deposits, thereby "creating" credit or money in the economy.

Step 2: The Process of Credit Creation:

The process is based on two key assumptions:

1. The entire banking system is treated as a single unit.
2. All transactions (receipts and payments) are done through banks.

The credit creation capacity of banks depends on the **Legal Reserve Ratio (LRR)**, which is the fraction of deposits that banks are legally required to keep as reserves (e.g., CRR + SLR).

Step 3: Numerical Example:

Let's assume the LRR is 20% (or 0.2) and there is an initial fresh deposit of Rupees 1,000.

- **Round 1:** A depositor deposits Rupees 1,000. The bank keeps 20% (Rupees 200) as a reserve and can lend out the remaining Rupees 800.
- **Round 2:** The person who borrows Rupees 800 spends it. The money eventually comes back to the banking system as a new deposit in someone else's account. The bank again keeps 20% of this Rupees 800 (Rupees 160) and lends out the remaining Rupees 640.
- **Round 3:** This Rupees 640 is spent and comes back as a new deposit. The bank keeps 20% (Rupees 128) and lends out Rupees 512.
- This process continues, with each new loan becoming smaller, until the initial excess reserves of Rupees 800 have been fully converted into required reserves.

Step 4: The Credit Multiplier:

The total amount of credit created can be calculated using the credit multiplier formula:

$$\text{Credit Multiplier} = \frac{1}{LRR}$$

In our example, the multiplier is $1/0.20 = 5$.

Total Deposit Creation = Initial Deposit $\times$ Credit Multiplier

$$\text{Total Deposits} = 1,000 \times 5 = \text{Rupees } 5,000$$

Thus, an initial deposit of Rupees 1,000 leads to a total deposit creation of Rupees 5,000.

Step 5: Final Answer:

Credit creation is the process where commercial banks, based on an initial deposit, are able to generate a much larger volume of total deposits through their lending activities. This capacity is determined by the credit multiplier, which is the reciprocal of the Legal Reserve Ratio.

Quick Tip

The lower the Legal Reserve Ratio (LRR), the higher the credit multiplier, and the greater the ability of banks to create credit.

23. Explain any three objectives of a Government Budget.

Solution:

Step 1: Understanding the Concept:

A government budget is an annual financial statement showing the estimated receipts and expenditures of the government for a fiscal year. It is a key instrument for implementing the government's economic and social policies.

Step 2: Explanation of Three Objectives:

Three major objectives of a government budget are:

1. **Reallocation of Resources:** The government aims to allocate resources in a way that balances the goals of profit maximization (for private sector) and social welfare. It does this through:
 - **Tax Concessions and Subsidies:** The government can encourage private investment in desirable areas (e.g., renewable energy) by providing subsidies or tax breaks. Conversely, it can discourage the production of harmful goods (e.g., tobacco, alcohol) by imposing heavy taxes.
 - **Direct Production:** The government can directly produce goods and services (e.g., public goods like national defense, roads, and parks) that the private sector may not find profitable to provide.
2. **Reducing Inequalities in Income and Wealth:** The government uses the budget to reduce the gap between the rich and the poor. The tools used are:
 - **Taxation:** Imposing a progressive income tax system, where the rich are taxed at a higher rate than the poor.
 - **Public Expenditure:** Spending the tax revenue on social welfare schemes, subsidies on essential goods, and public services that benefit the poorer sections of society more.
3. **Economic Stability (Controlling Price Fluctuations):** The government uses its budget to prevent business fluctuations and maintain price stability.
 - **During Inflation (rising prices):** The government can adopt a **surplus budget** policy. It reduces its own expenditure and increases taxes to curb the aggregate demand in the economy.
 - **During a Recession/Deflation (falling prices and unemployment):** The government can adopt a **deficit budget** policy. It increases its expenditure (on infrastructure, etc.) and reduces taxes to boost aggregate demand and stimulate economic activity.

Step 3: Final Answer:

Three key objectives of a government budget are the reallocation of resources to meet social priorities, the redistribution of income to reduce inequality, and the maintenance of economic stability by controlling inflation and recession.

Quick Tip

Think of the budget as the government's main tool to steer the economy. It can encourage or discourage activities (reallocation), help the poor (redistribution), and act like a brake or an accelerator (stabilization).

24. How is the flexible rate of exchange determined? Explain.

Solution:

Step 1: Understanding the Concept:

A **flexible rate of exchange**, also known as a floating exchange rate, is a system where the value of a currency is determined in the foreign exchange market by the free play of market forces of demand and supply, without any intervention by the government or central bank.

Step 2: Forces Determining the Exchange Rate:

The equilibrium exchange rate is determined at the point where the demand for foreign exchange is equal to the supply of foreign exchange.

1. **Demand for Foreign Exchange:** The demand for foreign currency arises from a country's residents who need to make payments abroad. The main sources of demand are:

- To import goods and services.
- For tourism and travel abroad.
- To make investments in foreign countries.
- To send unilateral transfers (gifts, remittances) abroad.

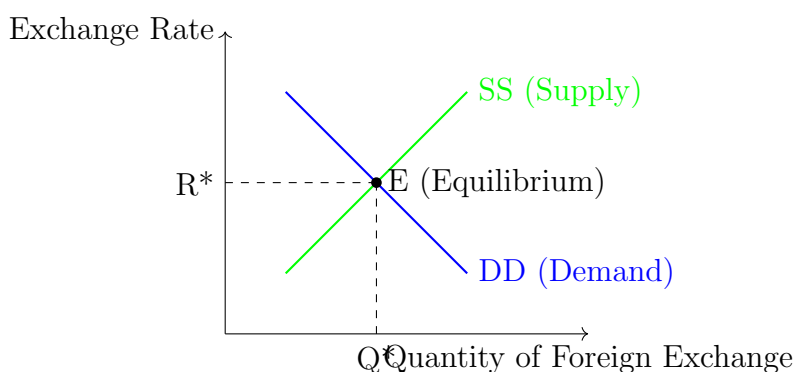
The demand curve for foreign exchange is **downward sloping**. A lower exchange rate (i.e., domestic currency is stronger) makes foreign goods cheaper, so the quantity demanded of foreign currency increases.

2. **Supply of Foreign Exchange:** The supply of foreign currency comes from foreigners who need the domestic currency to make payments in the country. The main sources of supply are:

- Receipts from exports of goods and services.
- Inflow of foreign investment (FDI and FII).
- Remittances and gifts from abroad.

The supply curve for foreign exchange is **upward sloping**. A higher exchange rate (i.e., domestic currency is weaker) makes domestic goods cheaper for foreigners, boosting exports and increasing the quantity supplied of foreign currency.

Step 3: Determination with a Diagram:



In the diagram, the Y-axis represents the exchange rate (e.g., Rupees per \$) and the X-axis represents the quantity of foreign exchange.

- The demand curve (DD) and supply curve (SS) intersect at point E.

- R^* is the **equilibrium exchange rate**.
- Q^* is the **equilibrium quantity** of foreign exchange traded.

If the exchange rate is above R^* , supply will exceed demand, causing the rate to fall. If the rate is below R^* , demand will exceed supply, causing the rate to rise. The rate will stabilize only at R^* .

Step 4: Final Answer:

Under a flexible system, the exchange rate is determined by the intersection of the demand and supply curves for foreign exchange in the foreign exchange market. The equilibrium rate is the price that equates the quantity of foreign currency demanded with the quantity supplied.

Quick Tip

Think of the exchange rate just like the price of any other commodity. Its price is determined where the demand from buyers meets the supply from sellers.

Long Answer Type Questions

25. Explain consumer's equilibrium with the help of indifference curves.

OR

When the price of a commodity increases from Rs. 10 per unit to Rs. 11 per unit, demand shrinks from 100 units to 90 units. Calculate elasticity of demand.

Solution:

Step 1: Understanding the Concept:

Consumer's Equilibrium is a point of maximum satisfaction for a consumer. It is a situation where a consumer spends their limited income on different goods in such a way that their total utility is maximized. At this point, the consumer has no tendency to change their consumption pattern. Indifference curve analysis (or Ordinal Utility Analysis) explains this equilibrium.

Step 2: Tools and Conditions for Equilibrium:

The equilibrium is determined using two tools:

1. **Indifference Map:** This represents the consumer's preferences, with higher indifference curves (ICs) showing higher levels of satisfaction.
2. **Budget Line:** This represents the consumer's income and the prices of goods, showing all affordable combinations.

The consumer reaches equilibrium when two conditions are met:

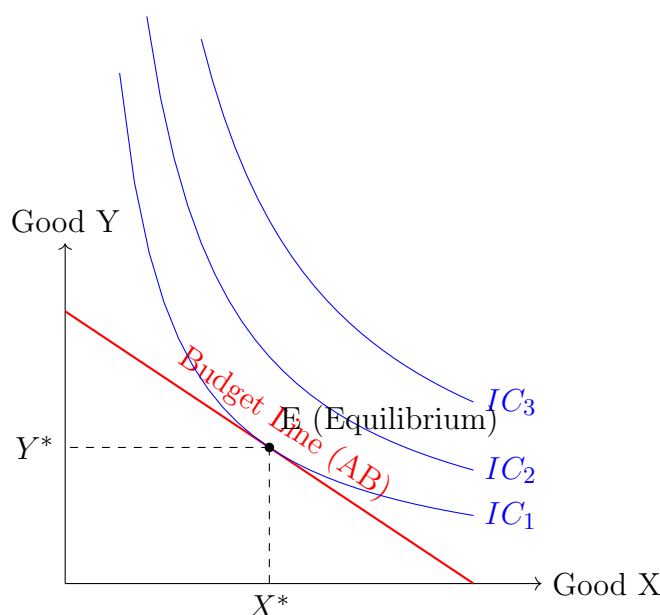
1. The budget line is tangent to the highest possible indifference curve. At this point, the slope of the IC equals the slope of the budget line.

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

(Where MRS is the Marginal Rate of Substitution, and P_x, P_y are prices of goods X and Y).

2. The indifference curve must be convex to the origin at the point of tangency. This implies a diminishing MRS.

Step 3: Explanation with Diagram:



In the diagram, the consumer can afford any point on the budget line AB. Points on IC_1 are attainable but offer less satisfaction. Points on IC_3 offer more satisfaction but are unaffordable. The optimal choice is point E, where the budget line is tangent to the highest possible indifference curve, IC_2 . At this point, the consumer maximizes their satisfaction by purchasing X^* of Good X and Y^* of Good Y.

Solution (Calculation of Elasticity of Demand):

Step 1: Understanding the Concept and Formula:

The question asks for the Price Elasticity of Demand (E_d), which measures how responsive the quantity demanded is to a price change. We use the percentage method.

$$E_d = (-) \frac{\text{Percentage Change in Quantity Demanded}}{\text{Percentage Change in Price}} = (-) \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

Where P = Initial Price, Q = Initial Quantity, ΔP = Change in Price, and ΔQ = Change in Quantity.

Step 2: Identifying the Given Values:

- Initial Price (P) = Rupees 10
- New Price (P_1) = Rupees 11
- Initial Quantity (Q) = 100 units
- New Quantity (Q_1) = 90 units

Step 3: Calculating the Changes:

- Change in Price (ΔP) = $P_1 - P = 11 - 10 = 1$
- Change in Quantity (ΔQ) = $Q_1 - Q = 90 - 100 = -10$

Step 4: Substituting the Values and Calculating:

$$E_d = (-) \frac{-10}{1} \times \frac{10}{100}$$

$$E_d = -(-10) \times \frac{10}{100}$$

$$E_d = 10 \times \frac{10}{100}$$

$$E_d = \frac{100}{100} = 1$$

Step 5: Final Answer and Interpretation:

The price elasticity of demand is **1**.

Since $E_d = 1$, the demand is **unitary elastic**. This means the percentage change in quantity demanded (-10%) is exactly equal to the percentage change in price (+10%).

Quick Tip

For consumer equilibrium, the key idea is "tangency." The point where the budget line just touches the highest indifference curve is the solution. For elasticity calculations, set up your variables (P , Q , ΔP , ΔQ) clearly before plugging them into the formula to avoid errors.

26. What do you understand by Perfect Competition? Explain its salient features.
OR

Explain the supply curve of a firm in the short period and long period.

Solution:

Step 1: Meaning of Perfect Competition:

Perfect Competition is a market structure characterized by a very large number of buyers and sellers of a homogeneous (identical) product, where no individual buyer or seller can influence the market price. The market price is determined by the industry's demand and supply forces,

and each firm is a "price-taker." It is a theoretical benchmark model of a market.

Step 2: Salient Features of Perfect Competition:

1. **Large Number of Buyers and Sellers:** There are so many firms and buyers that the actions of any single one have a negligible impact on the market price and output.
2. **Homogeneous Product:** All firms in the industry sell an identical product. There is no difference in terms of quality, design, or branding. This makes the products perfect substitutes for each other.
3. **Freedom of Entry and Exit:** Firms are free to enter the industry if there are super-normal profits and exit the industry if they are incurring losses. This ensures that in the long run, firms earn only normal profits.
4. **Perfect Knowledge:** Both buyers and sellers have complete information about the market prices and the quality of the product. This prevents any firm from charging a different price than the market price.
5. **Perfect Mobility of Factors of Production:** Resources like labor and capital can move freely from one firm to another or from one industry to another without any restrictions.
6. **No Transport Costs:** It is assumed that there are no transport costs, so that a single uniform price prevails throughout the market.

Step 3: Final Answer:

Perfect competition is a market with many sellers and buyers, an identical product, and free entry and exit. Its key features lead to a situation where firms are price-takers and earn only normal profits in the long run.

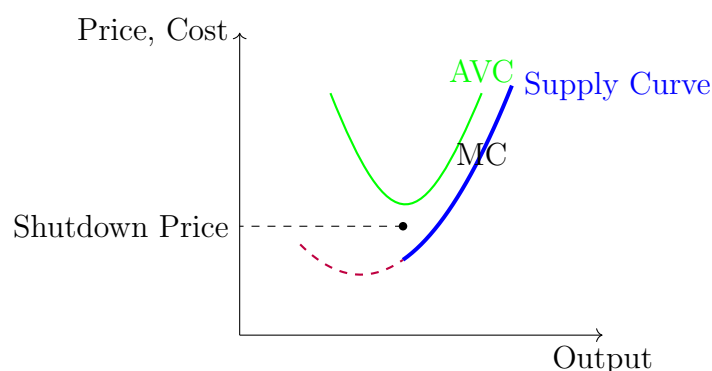
Solution (Supply Curve of a Firm):

Step 1: Understanding the Supply Curve:

A firm's supply curve shows the quantity of output the firm is willing and able to offer for sale at different prices. Under perfect competition, a firm aims to maximize profit by producing at the level where Price (P) = Marginal Cost (MC). Therefore, the firm's MC curve is the basis for its supply curve.

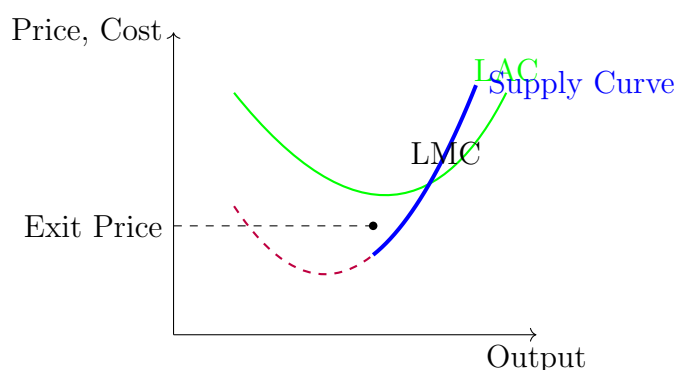
Step 2: Short-Period Supply Curve:

In the short run, a firm has fixed costs and variable costs. The firm will continue to produce as long as the price is greater than or equal to its Average Variable Cost (AVC). If the price falls below AVC , it will shut down to minimize losses. Therefore, the **short-run supply curve of a firm is the rising portion of its Marginal Cost (MC) curve which lies above the minimum point of the Average Variable Cost (AVC) curve.**



Step 3: Long-Period Supply Curve:

In the long run, all costs are variable. A firm will continue to produce only if the price is greater than or equal to its Long-Run Average Cost (LAC). If the price falls below LAC, the firm will exit the industry. Therefore, the **long-run supply curve of a firm is the rising portion of its Long-Run Marginal Cost (LMC) curve which lies above the minimum point of the Long-Run Average Cost (LAC) curve.**



Quick Tip

To find a firm's supply curve, think about its shutdown/exit condition. In the short run, it must cover at least its variable costs (AVC). In the long run, it must cover all its costs (LAC). The supply curve is the MC curve above these minimum points.

27. Following data is related to an economy. On the basis of these data calculate National Income of that economy: Wages: 1000, Rent: 400, Interest: 50, Dividend: 300, Mixed Income: 250. (Amounts in Crore Rupees).

OR

Describe the Product method of estimation of National Income.

Solution:

Step 1: Understanding the Concept and Method:

The given data consists of factor incomes (Wages, Rent, Interest) and profits (Dividend is a part

of profit), along with Mixed Income. This indicates that we must use the **Income Method** to calculate National Income.

The Income Method calculates the Net Domestic Product at Factor Cost (NDP at FC) by summing up all the factor incomes generated within the domestic territory of a country.

National Income is Net National Product at Factor Cost (NNP at FC). Assuming Net Factor Income from Abroad (NFIA) is zero, NDP at FC will be equal to NNP at FC.

Step 2: Formula for Income Method:

$$\text{NDP at FC} = \text{Compensation of Employees} + \text{Rent and Royalty} + \text{Interest} + \text{Profit} + \text{Mixed Income}.$$

- Compensation of Employees includes wages and salaries.
- Profit includes dividends, corporate tax, and undistributed profits.

Step 3: Identifying Components and Calculating:

From the given data:

- Wages (Compensation of Employees) = Rupees 1000 Crore
- Rent = Rupees 400 Crore
- Interest = Rupees 50 Crore
- Profit (only Dividend is given, so we take that as the profit component) = Rupees 300 Crore
- Mixed Income = Rupees 250 Crore

Now, sum up these components:

$$\text{NDP at FC} = \text{Wages} + \text{Rent} + \text{Interest} + \text{Dividend} + \text{Mixed Income}$$

$$\text{NDP at FC} = 1000 + 400 + 50 + 300 + 250$$

$$\text{NDP at FC} = \text{Rupees 2000 Crore}$$

Step 4: Final Answer:

Since no information about Net Factor Income from Abroad (NFIA) is given, we assume it to be zero. Therefore, National Income (NNP at FC) = NDP at FC = Rupees 2000 Crore.

The National Income of the economy is **Rupees 2000 Crore**.

Solution (Product Method of Estimating National Income):

Step 1: Meaning of the Product Method:

The Product Method, also known as the Value Added Method or Output Method, is a way of calculating National Income by measuring the contribution of each producing enterprise to the production in the domestic territory of the country in a year. It estimates the money value of all final goods and services produced.

Step 2: The Concept of Value Added:

To avoid the problem of double counting (i.e., counting the value of the same good multiple

times), this method sums up the 'Value Added' by each firm. **Value Added** is the difference between the value of a firm's output and the value of intermediate inputs it purchased from other firms.

$$\text{Value Added} = \text{Value of Output} - \text{Intermediate Consumption}$$

Where:

- **Value of Output** = Sales + Change in Stock
- **Change in Stock** = Closing Stock - Opening Stock

Step 3: Steps for Estimation:

The estimation of National Income using this method involves the following steps:

1. **Identify and Classify Producing Units:** All producing enterprises in the domestic economy are identified and classified into three sectors: Primary (agriculture, etc.), Secondary (manufacturing, etc.), and Tertiary (services, etc.).
2. **Calculate Gross Value Added at Market Price (GVA at MP):** For each sector, the GVA at MP is calculated by summing up the value added by all firms in that sector.
3. **Calculate Gross Domestic Product at Market Price (GDP at MP):** The GVA at MP of all three sectors is summed up to get the GDP at MP.

$$GDP_{MP} = \sum GVA_{MP} \text{ of all sectors}$$

4. **Calculate National Income (NNP at FC):** To arrive at National Income (NNP at FC) from GDP at MP, the following adjustments are made:

$$NNP_{FC} = GDP_{MP} - \text{Depreciation} - \text{Net Indirect Taxes} + \text{Net Factor Income from Abroad (NFIA)}$$

Step 4: Final Answer:

The Product method measures national income by summing up the net value added by all producing units within the economy. It involves calculating GDP at MP first and then making necessary adjustments for depreciation, indirect taxes, subsidies, and net factor income from abroad to arrive at National Income.

Quick Tip

The key to the Product/Value Added method is to subtract intermediate consumption to avoid double counting. Remember you are measuring the value *added* at each stage of production, not the total sales value.