# **UP Board Economics - 329 (JF) - 2025 Question Paper with Solutions**

**Time Allowed :**3 Hours | **Maximum Marks :**70 | **Total questions :**35

## **General Instructions**

#### Instruction:

- i) *All* questions are compulsory. Marks allotted to each question are given in the margin.
- ii) In numerical questions, give all the steps of calculation.
- iii) Give relevant answers to the questions.
- iv) Give chemical equations, wherever necessary.

Q1. Which one of the following is true? When the marginal utility becomes negative:

(A) the total utility becomes negative.

(B) the total utility decreases.

(C) the total utility becomes zero.

(D) the total utility will increase but at a slower rate.

**Correct Answer:** (B) the total utility decreases.

**Solution:** 

**Step 1: Understand the concept of marginal utility.** 

Marginal utility is the additional satisfaction or benefit derived from consuming one more unit of a good or service. When marginal utility is positive, total utility increases with each additional unit consumed. However, once marginal utility becomes negative, the consumption of additional units reduces total satisfaction.

Step 2: Impact of negative marginal utility on total utility.

When marginal utility becomes negative, the total utility stops increasing and begins to decrease. This is because the additional consumption of a good or service leads to a decrease in overall satisfaction.

**Step 3: Conclusion.** 

Thus, the correct answer is (B) the total utility decreases, as negative marginal utility implies a reduction in total satisfaction.

**Final Answer:** 

The total utility decreases.

Quick Tip

Negative marginal utility means consuming more leads to reduced total satisfaction.

**Q2.** Which one of the following is true? The total variable cost is equal to:

(A) The average variable  $cost \times quantity$ 

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- (B) The average variable cost / quantity
- (C) The marginal variable  $cost \times quantity$
- (D) The marginal variable cost / quantity

**Correct Answer:** (A) The average variable  $cost \times quantity$ .

#### **Solution:**

### Step 1: Understand total variable cost (TVC).

Total variable cost refers to the cost incurred due to the variable factors of production (e.g., labor, raw materials) as output increases. It changes with the level of production.

## Step 2: Relationship between total variable cost and average variable cost.

Total variable cost (TVC) is calculated by multiplying the average variable cost (AVC) by the quantity of output produced:

$$TVC = AVC \times Quantity.$$

#### **Step 3: Conclusion.**

Thus, the correct answer is (A) The total variable cost is equal to the average variable cost multiplied by quantity.

#### **Final Answer:**

The total variable cost is equal to average variable cost  $\times$  quantity.

### Quick Tip

TVC is derived from multiplying AVC by the quantity of output.

- **Q3.** In a mixed economy, decisions related to production and consumption are taken by:
- (A) The Central government only.
- (B) The State governments only.
- (C) The Central and State governments, both.
- (D) The Public Sector and Private Sector.

**Correct Answer:** (C) The Central and State governments, both.

**Solution:** 

**Step 1: Understand the mixed economy.** 

In a mixed economy, both the government and the private sector participate in decision-making related to production and consumption. The government has a role in regulating and guiding the economy while allowing the private sector to operate freely in areas such as market exchange.

**Step 2: Role of central and state governments.** 

Both central and state governments make decisions related to the production and consumption of goods and services in a mixed economy, ensuring a balance between public and private interests.

Step 3: Conclusion.

Thus, the correct answer is (C) the Central and State governments, both.

**Final Answer:** 

The Central and State governments, both.

Quick Tip

In a mixed economy, the government regulates key industries, while the private sector is free to operate in other sectors.

**Q4.** The statement 'Other things being constant, an increase in money supply will increase the price level.' is related to:

- (A) Normative economics
- (B) Positive economics
- (C) Micro economics
- (D) All of the above

**Correct Answer:** (B) Positive economics.

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#### **Solution:**

## **Step 1: Understand positive economics.**

Positive economics focuses on objective analysis and descriptions of economic phenomena. It deals with "what is" and is concerned with cause and effect, such as how an increase in money supply affects price levels.

### **Step 2: Normative economics vs Positive economics.**

Normative economics, on the other hand, deals with value judgments and what ought to be. The statement provided is a positive statement, as it explains a cause and effect without making any judgments.

## **Step 3: Conclusion.**

Thus, the correct answer is (B) Positive economics, which deals with factual, cause-and-effect relationships.

#### **Final Answer:**

Positive economics.

#### Quick Tip

Positive economics is focused on explaining and predicting economic phenomena.

- **Q5.** Which one of the following is true? In a perfectly competitive market, the:
- (A) Average Revenue (AR) = Marginal Revenue (MR)
- (B) Average Revenue (AR) ; Marginal Revenue (MR)
- (C) Average Revenue (AR); Marginal Revenue (MR)
- (D) Average Revenue (AR) = Total Revenue (TR)

**Correct Answer:** (A) Average Revenue (AR) = Marginal Revenue (MR).

#### **Solution:**

Step 1: Concept of average revenue and marginal revenue.

In a perfectly competitive market, average revenue (AR) refers to the revenue per unit of output, and marginal revenue (MR) refers to the additional revenue from selling one more unit of output. In a perfectly competitive market, both are equal to the price of the good.

## **Step 2: Perfect competition characteristics.**

In a perfectly competitive market, firms are price takers, meaning they cannot influence the market price. Therefore, the price of the good is constant, and thus average revenue and marginal revenue are equal.

### Step 3: Conclusion.

Thus, the correct answer is (A) Average Revenue (AR) = Marginal Revenue (MR).

#### **Final Answer:**

Average Revenue (AR) = Marginal Revenue (MR).

### Quick Tip

In perfect competition, AR and MR are equal, as firms accept the market price.

**Q6.** Which one of the following is true? Net investment is equal to:

- (A) Gross Investment Cost
- (B) Gross Investment Depreciation
- (C) Gross Investment Marginal Investment
- (D) Gross investment Net Profit

**Correct Answer:** (B) Gross Investment - Depreciation.

#### **Solution:**

#### **Step 1: Concept of gross and net investment.**

Gross investment refers to the total investment made by a firm in a given period, including the replacement of worn-out capital. Net investment is the amount by which the capital stock increases, i.e., it accounts for depreciation.

#### Step 2: Relationship between net investment and depreciation.

Net investment is calculated by subtracting depreciation (the wear and tear on capital) from gross investment, as depreciation reduces the effective increase in capital.

## **Step 3: Conclusion.**

Thus, the correct answer is (B) Gross Investment - Depreciation.

#### **Final Answer:**

Gross Investment - Depreciation.

### Quick Tip

Net investment accounts for depreciation and reflects the actual increase in capital stock.

**Q7.** Which one of the following is false? At the time of Independence (1947), one Indian rupee was equal to:

- (A) 4 Four Annas
- (B) 2 Eight Annas
- (C) 64 Paise
- (D) 100 Paise

**Correct Answer:** (B) 2 Eight Annas.

#### **Solution:**

#### **Step 1: Understand the historical context.**

At the time of India's Independence in 1947, the Indian currency system was based on the "Anna" system. One Indian Rupee (INR) was equivalent to 16 Annas, and each Anna was divided into 4 Paise. Thus, the conversion should be correct based on this system.

#### Step 2: Conversion breakdown.

1 Rupee = 16 Annas = 64 Paise. Therefore, option (B) stating that one rupee was equal to 2 Eight Annas is incorrect, as one rupee was equal to 16 Annas, not 8 Annas.

#### **Step 3: Conclusion.**

Thus, the correct answer is (B) 2 Eight Annas.

#### **Final Answer:**

2 Eight Annas

## Quick Tip

At the time of independence, 1 Rupee was equivalent to 16 Annas or 64 Paise.

Q8. Which one of the following expresses 'National Income Identity' for a closed economy?

- (A) Y = C + I + G
- (B) Y = C + I + G + X
- (C) Y = C + I + G + (X M)
- (D) Y = C + I + G + NX

**Correct Answer:** (A) Y = C + I + G.

### **Solution:**

## Step 1: Definition of National Income Identity for a closed economy.

In a closed economy, there are no exports or imports (X = M), and the national income is the sum of consumption (C), investment (I), and government spending (G).

# **Step 2: National Income Identity.**

In the case of a closed economy, the identity for National Income (Y) is:

$$Y = C + I + G$$

where C represents consumption, I is investment, and G is government spending.

# **Step 3: Conclusion.**

Thus, the correct answer is (A) Y = C + I + G.

#### **Final Answer:**

$$Y = C + I + G$$

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In a closed economy, there are no exports or imports, so the national income identity is Y = C + I + G.

- **Q9.** Which one of the following is not a component of capital account in balance of payments?
- (A) Foreign debt
- (B) Foreign investment
- (C) Foreign remittances
- (D) Foreign aid

**Correct Answer:** (C) Foreign remittances.

#### **Solution:**

## **Step 1: Understand the balance of payments.**

The balance of payments (BoP) records all economic transactions between the residents of a country and the rest of the world. It is divided into two main accounts: the current account and the capital account.

## Step 2: Capital account components.

The capital account includes transactions related to foreign investment, foreign debt, and foreign aid, which involve capital flows into and out of a country.

#### **Step 3: Foreign remittances.**

Foreign remittances, however, are recorded in the current account, as they are payments made by individuals working abroad to their home countries, and not capital flows.

### Step 4: Conclusion.

Thus, the correct answer is (C) Foreign remittances.

#### **Final Answer:**

Foreign remittances

Foreign remittances are a part of the current account, not the capital account.

Q10. If the National Income (Y) of a country increases by ₹100 crores and the National Consumption (C) increases by ₹80 crores, then the Marginal Propensity to Save will be equal to:

- (A) 0.2
- (B) 0.8
- (C) 2.0
- (D) 8.0

Correct Answer: (A) 0.2.

### **Solution:**

## Step 1: Define Marginal Propensity to Save (MPS).

The Marginal Propensity to Save (MPS) is the change in savings divided by the change in income:

$$MPS = \frac{\Delta S}{\Delta Y}$$

### **Step 2: Find savings and income change.**

Since consumption (C) increased by ₹80 crores, savings (S) must have increased by the remaining amount of the increase in national income. Thus, savings increased by:

$$\Delta S = \Delta Y - \Delta C = 100 - 80 = 20$$
 crores

#### **Step 3: Calculate MPS.**

Now, using the formula:

$$MPS = \frac{20}{100} = 0.2$$

#### **Step 4: Conclusion.**

Thus, the correct answer is (A) 0.2.

#### **Final Answer:**

0.2

MPS measures how much of an additional income is saved.

Q11. 'Higher indifference curve represents higher level of satisfaction.' Explain.

#### **Solution:**

#### Step 1: Understand the concept of indifference curve.

An indifference curve represents a set of combinations of two goods that give a consumer the same level of satisfaction or utility. The consumer is indifferent between these combinations.

### **Step 2: Higher indifference curves.**

When an indifference curve shifts to a higher position (i.e., farther from the origin), it represents a higher level of satisfaction because it reflects combinations of goods that provide more of one or both goods, hence increasing total utility.

### **Step 3: Conclusion.**

Thus, a higher indifference curve represents a higher level of satisfaction, as it indicates that the consumer can achieve more of the desired goods while maintaining the same level of utility.

#### **Final Answer:**

A higher indifference curve represents a higher level of satisfaction.

### Quick Tip

Indifference curves farther from the origin represent higher utility, as they correspond to better combinations of goods.

Q12. Differentiate between Normal goods and Inferior goods.

#### **Solution:**

## **Step 1: Definition of Normal goods.**

Normal goods are goods whose demand increases as income rises. For example, luxury items, branded clothes, or high-end electronic gadgets.

### **Step 2: Definition of Inferior goods.**

Inferior goods are goods whose demand decreases as income rises. As consumers' income increases, they tend to substitute these goods with superior alternatives. Examples include generic brands or lower-quality food products.

#### Step 3: Comparison.

- \*\*Normal goods:\*\* Demand increases with rising income. - \*\*Inferior goods:\*\* Demand decreases with rising income.

### **Step 4: Conclusion.**

Thus, normal goods and inferior goods differ in their demand behavior relative to changes in consumer income.

#### **Final Answer:**

Normal goods' demand increases with income, whereas Inferior goods' demand decreases with income

### Quick Tip

Normal goods become more popular as income rises, while inferior goods lose popularity as income increases.

Q13. What are different means of production and the rewards given to them?

#### **Solution:**

#### **Step 1: Define means of production.**

The means of production are the resources and tools required to produce goods and services. These include land, labor, capital, and entrepreneurship.

### **Step 2: Rewards for each factor of production.**

- \*\*Land:\*\* The reward for land is rent, paid for the use of land or natural resources. -
- \*\*Labor:\*\* The reward for labor is wages or salaries, paid for the work performed by individuals. \*\*Capital:\*\* The reward for capital is interest, earned on money or assets

invested in businesses. - \*\*Entrepreneurship:\*\* The reward for entrepreneurship is profit, earned from organizing and managing production.

### **Step 3: Conclusion.**

Thus, the means of production are land, labor, capital, and entrepreneurship, and their rewards are rent, wages, interest, and profit, respectively.

#### **Final Answer:**

The rewards for production factors are: Rent for land, Wages for labor, Interest for capital, and Profit for

### Quick Tip

The factors of production each have a specific reward: Rent for land, Wages for labor, Interest for capital, and Profit for entrepreneurship.

**Q14.** Describe three factors that affect the supply curve of a firm.

#### **Solution:**

#### **Step 1: Price of the good or service.**

The price of a good or service is a primary factor affecting its supply. As the price increases, the quantity supplied by a firm typically increases due to higher profitability, shifting the supply curve to the right.

### **Step 2: Input prices.**

The cost of inputs or factors of production (e.g., labor, raw materials) directly affects supply. If input prices increase, the cost of production rises, leading to a decrease in supply and a leftward shift of the supply curve.

### **Step 3: Technological advancements.**

Improvements in technology can make production more efficient, reducing costs and increasing the supply of goods. This results in a rightward shift of the supply curve.

#### **Step 4: Conclusion.**

Thus, the supply curve of a firm is influenced by the price of the good, input prices, and technological advancements.

#### **Final Answer:**

Factors affecting the supply curve include price of the good, input prices, and technological advanceme

## Quick Tip

A rightward shift in the supply curve occurs when the firm can produce more due to price increases, lower input costs, or better technology.

Q15. What is the relation between G.D.P. at market price and G.V.A.?

#### **Solution:**

## **Step 1: Define GDP and GVA.**

- \*\*GDP (Gross Domestic Product)\*\* at market price is the total value of all goods and services produced within a country's borders, valued at current market prices. - \*\*GVA (Gross Value Added)\*\* is the value of goods and services produced in an economy, minus the cost of inputs and raw materials that are directly attributable to that production.

## Step 2: Relationship between GDP and GVA.

The relationship between GDP at market price and GVA is given by the formula:

GDP at market price = GVA + Taxes on production – Subsidies on production

Here, GDP is the total value produced in an economy, and GVA accounts for the value added by industries.

#### **Step 3: Conclusion.**

Thus, GDP at market price is derived from GVA by adding taxes and subtracting subsidies on production.

#### **Final Answer:**

GDP at market price = GVA + Taxes - Subsidies.

## Quick Tip

GVA represents the economic value added by production, while GDP includes taxes and subtracts subsidies.

**Q16.** What is called the point of 'effective demand'?

#### **Solution:**

## **Step 1: Define effective demand.**

Effective demand refers to the level of demand for goods and services in an economy that is backed by the ability to pay for them. It is the total demand that results in the purchase of goods and services at a given price level.

#### **Step 2: Point of effective demand.**

The point of effective demand occurs when the total demand for goods and services in the economy equals the total supply at a specific price level. It determines the equilibrium output in an economy.

### **Step 3: Conclusion.**

Thus, the point of effective demand is the level of demand that ensures the purchase of goods and services at the prevailing market prices.

#### **Final Answer:**

The point of effective demand is where total demand equals total supply at a given price level.

### Quick Tip

Effective demand reflects the demand that can be supported by consumers' purchasing power.

**Q17.** Differentiate between 'Revenue Expenditure' and 'Capital Expenditure' of government budget.

#### **Solution:**

#### **Step 1: Define Revenue Expenditure.**

Revenue expenditure refers to the government's spending on goods and services that are consumed in the short term. This includes expenditure on salaries, subsidies, and routine administrative costs.

### **Step 2: Define Capital Expenditure.**

Capital expenditure refers to the government's spending on long-term investments such as infrastructure, machinery, and buildings. These expenditures are meant to create future assets or improve the productive capacity of the economy.

### **Step 3: Comparison.**

- \*\*Revenue Expenditure: \*\* Current, short-term spending (e.g., salaries, subsidies). -
- \*\*Capital Expenditure:\*\* Long-term investment in physical assets (e.g., infrastructure, education).

#### **Step 4: Conclusion.**

Thus, the key difference is that revenue expenditure is for day-to-day functioning, while capital expenditure is aimed at long-term growth and development.

#### **Final Answer:**

Revenue Expenditure is for daily operations, while Capital Expenditure is for long-term investments.

#### Quick Tip

Capital expenditure enhances future capacity, while revenue expenditure meets current needs.

Q18. What are the different factors that affect the supply of foreign exchange?

#### **Solution:**

#### **Step 1: Understanding the supply of foreign exchange.**

The supply of foreign exchange refers to the amount of foreign currency available for exchange in an economy, primarily driven by factors such as exports, remittances, and foreign investment.

#### Step 2: Key factors affecting supply of foreign exchange.

- \*\*Exports:\*\* The greater the exports of a country, the higher the supply of foreign currency, as foreign buyers exchange their currency for local goods. - \*\*Foreign Direct Investment (FDI):\*\* Investments from foreign entities increase the supply of foreign

exchange. - \*\*Remittances:\*\* Money sent by nationals working abroad increases the supply of foreign exchange. - \*\*Government Policies:\*\* Policies related to trade, tariffs, and foreign exchange controls can either encourage or restrict the flow of foreign exchange. - \*\*Interest Rates and Economic Stability:\*\* Higher interest rates attract foreign investment, which increases the supply of foreign exchange. Economic stability also encourages inflows of foreign capital.

### **Step 3: Conclusion.**

Thus, the supply of foreign exchange is influenced by exports, foreign investment, remittances, government policies, and the overall economic environment.

#### **Final Answer:**

The supply of foreign exchange is influenced by exports, foreign investment, remittances, policies, and

## Quick Tip

Exports, investment inflows, and remittances are key contributors to the supply of foreign exchange.

**Q19.** Explain the law of diminishing marginal rate of substitution in indifference curves, with the help of diagram.

#### **Solution:**

#### Step 1: Define the law of diminishing marginal rate of substitution (MRS).

The law of diminishing marginal rate of substitution states that as a consumer moves along an indifference curve and substitutes one good for another, the marginal rate of substitution (MRS) between the two goods diminishes. In simple terms, as the consumer consumes more of one good and less of another, they are willing to give up less and less of the second good to get more of the first good.

#### **Step 2: Explanation of MRS.**

The marginal rate of substitution is the slope of the indifference curve, which shows the amount of one good that a consumer is willing to give up for an additional unit of another good, while maintaining the same level of satisfaction.

### **Step 3: Diagram and diminishing MRS.**

In the diagram of an indifference curve, as we move down along the curve from left to right, the consumer substitutes more of good X for good Y. The rate at which good Y is given up decreases as more of good X is consumed, hence the slope of the curve flattens.

### **Step 4: Conclusion.**

Thus, the law of diminishing marginal rate of substitution implies that as a consumer substitutes goods, the amount of one good that they are willing to give up for an additional unit of the other good decreases.

#### **Final Answer:**

As a consumer substitutes goods, the marginal rate of substitution diminishes.

## Quick Tip

The diminishing MRS explains why consumers value goods less as they accumulate more of them.

**Q20.** Explain the Average Revenue (AR), Marginal Revenue (MR) and Total Revenue (TR).

#### **Solution:**

#### **Step 1: Define Total Revenue (TR).**

Total Revenue (TR) is the total income a firm receives from selling a given quantity of goods or services. It is calculated by multiplying the price per unit by the quantity sold.

$$TR = P \times Q$$

where P is the price of the good and Q is the quantity sold.

## **Step 2: Define Average Revenue (AR).**

Average Revenue (AR) is the revenue earned per unit of output sold. It is calculated by dividing total revenue by the quantity sold.

$$AR = \frac{TR}{Q} = P$$

In a perfectly competitive market, AR is equal to the price per unit.

# **Step 3: Define Marginal Revenue (MR).**

Marginal Revenue (MR) is the additional revenue gained by selling one more unit of output. It is the change in total revenue divided by the change in quantity.

$$MR = \frac{\Delta TR}{\Delta Q}$$

In perfect competition, MR equals the price, but in imperfect competition, MR is less than the price.

### **Step 4: Conclusion.**

Thus, the key relationships are: - \*\*Total Revenue (TR):\*\* Total income from sales. - \*\*Average Revenue (AR):\*\* Revenue per unit of output. - \*\*Marginal Revenue (MR):\*\* Additional revenue from one more unit of output.

### **Final Answer:**

TR = P × Q, AR = P, 
$$MR = \frac{\Delta TR}{\Delta Q}$$

### Quick Tip

In perfect competition, AR = MR = Price.

**Q21.** Describe four demerits of barter system.

### **Solution:**

## **Step 1: Define the barter system.**

A barter system is an old method of exchange where goods and services are traded directly for other goods and services, without using money.

#### **Step 2: Demerits of the barter system.**

- \*\*Double Coincidence of Wants:\*\* For a trade to occur, both parties must want what the other has. This makes exchanges difficult. - \*\*Indivisibility of Goods:\*\* Some goods cannot be divided into smaller units to facilitate trade, causing inefficiencies. - \*\*Lack of a Standard Measure:\*\* In barter, there is no common measure of value, making it hard to compare the

worth of different goods. - \*\*Difficulty in Storing Value:\*\* Goods may not be easily stored or preserved for future use, unlike money, which acts as a store of value.

#### **Step 3: Conclusion.**

Thus, the barter system has several limitations that make it inefficient for facilitating trade in a modern economy.

#### **Final Answer:**

The demerits of barter system are: Double Coincidence of Wants, Indivisibility of Goods, Lack of Standard Control of Cont

### Quick Tip

The barter system is inefficient due to the difficulty in matching wants and the absence of a common measure of value.

**Q22.** What is autonomous investment and what is its role in the economy?

#### **Solution:**

#### **Step 1: Define autonomous investment.**

Autonomous investment refers to the level of investment that occurs in an economy regardless of the current level of national income or economic activity. It is driven by factors such as technological progress, government policies, or expectations of future profit.

#### Step 2: Role of autonomous investment in the economy.

Autonomous investment plays a crucial role in boosting economic growth by increasing capital stock and improving productivity. It is typically non-income dependent and often initiated by government expenditure or private sector decisions.

#### **Step 3: Conclusion.**

Thus, autonomous investment is a key driver of economic expansion, as it leads to increased production capacity and contributes to long-term economic development.

#### **Final Answer:**

Autonomous investment is independent of current income and drives long-term economic growth.

Autonomous investment is crucial for initiating economic growth, regardless of short-term economic conditions.

Q23. Write short note on 'Goods and Services Tax' in India.

#### **Solution:**

## **Step 1: Define Goods and Services Tax (GST).**

Goods and Services Tax (GST) is a single, comprehensive tax levied on the supply of goods and services. It replaced multiple indirect taxes in India, such as VAT, excise duty, and service tax.

### **Step 2: Key Features of GST.**

- \*\*Single Tax System: \*\* GST simplifies the tax structure by replacing various central and state taxes. - \*\*Dual GST Structure: \*\* In India, GST is levied by both the central and state governments. - \*\*Destination-based Tax: \*\* GST is applied at the point of consumption, not the point of origin, ensuring that taxes are paid where the goods are consumed.

#### **Step 3: Conclusion.**

GST has been beneficial in promoting ease of doing business by reducing tax cascading and providing a transparent taxation system.

#### **Final Answer:**

GST is a single, comprehensive tax on goods and services, replacing multiple taxes in India.

#### Quick Tip

GST simplifies the taxation system and ensures uniform tax treatment across India.

**Q24.** Describe the different components of the current account in the balance of payments.

#### **Solution:**

### **Step 1: Define the current account.**

The current account in the balance of payments records all transactions related to the import and export of goods and services, income flows, and unilateral transfers. It reflects a country's trade balance and income exchanges with the rest of the world.

## **Step 2: Components of the Current Account.**

The current account consists of the following components: - \*\*Trade Balance (Balance of Trade):\*\* This includes exports and imports of goods. A surplus occurs when a country exports more goods than it imports, and a deficit occurs when imports exceed exports. - \*\*Services Balance:\*\* This includes exports and imports of services such as tourism, transportation, and financial services. - \*\*Income (Primary Income):\*\* This represents the income earned by residents from foreign investments (such as interest and dividends) and payments made to foreign residents for their investments within the country. - \*\*Current Transfers (Secondary Income):\*\* This includes transfers that do not involve a quid pro quo, such as remittances from workers abroad, foreign aid, and gifts.

#### **Step 3: Conclusion.**

The current account provides a snapshot of a country's economic transactions with the outside world. A surplus in the current account indicates that a country is exporting more than it is importing, while a deficit indicates the opposite.

#### **Final Answer:**

The current account includes the trade balance, services balance, income, and current transfers.

#### Quick Tip

A country's current account reflects its trade relationships, income exchanges, and transfers, giving insight into its economic position.

Q25. Explain the 'Law of Equi-Marginal Utility' in the analysis of consumer's equilibrium.

#### **Solution:**

## **Step 1: Define Equi-Marginal Utility.**

The Law of Equi-Marginal Utility states that a consumer will allocate their limited income between goods in such a way that the marginal utility per unit of money spent is equal for all goods. This maximizes total satisfaction or utility.

### **Step 2: Mathematical Representation.**

If a consumer spends their income I on goods X and Y, the equilibrium condition for the consumer is:

$$\frac{MU_X}{P_X} = \frac{MU_Y}{P_Y}$$

where  $MU_X$  and  $MU_Y$  represent the marginal utilities of goods X and Y, and  $P_X$  and  $P_Y$  are their respective prices. The consumer reaches equilibrium when the ratio of marginal utility to price is the same for all goods.

### **Step 3: Diagrammatic Representation.**

In an indifference curve diagram, the consumer's equilibrium is achieved where the budget line is tangent to the highest possible indifference curve. This represents the point at which the consumer cannot increase utility by reallocating their income.

## Step 4: Conclusion.

Thus, the law of equi-marginal utility explains how consumers make choices to maximize their satisfaction by equalizing the marginal utility per unit of money spent on each good.

#### **Final Answer:**

The Law of Equi-Marginal Utility ensures consumer equilibrium by equalizing the marginal utility per

## Quick Tip

To achieve equilibrium, a consumer allocates their budget where the marginal utility per rupee spent on each good is equal.

#### OR

**Q25** (Alternative). What do you understand by Demand? Describe the determinants of Demand.

#### **Solution:**

#### **Step 1: Define Demand.**

Demand refers to the quantity of a good or service that consumers are willing and able to purchase at various prices, over a given period of time, holding all other factors constant.

### **Step 2: Law of Demand.**

The law of demand states that, ceteris paribus (all else being equal), as the price of a good increases, the quantity demanded decreases, and vice versa. This is due to the substitution effect and the income effect.

### **Step 3: Determinants of Demand.**

The demand for a good is influenced by several factors: - \*\*Price of the Good:\*\* As the price of the good rises, demand tends to fall (inverse relationship). - \*\*Income of Consumers:\*\* An increase in consumer income generally leads to an increase in demand for normal goods and a decrease in demand for inferior goods. - \*\*Tastes and Preferences:\*\* Changes in consumer preferences, due to trends, advertising, or health considerations, can increase or decrease demand. - \*\*Prices of Related Goods:\*\* The demand for a good can be affected by the price of substitutes (goods that can replace each other) and complements (goods that are used together). - \*\*Expectations of Future Prices:\*\* If consumers expect prices to rise in the future, they may buy more now, increasing current demand. - \*\*Population Size and Demographics:\*\* An increase in population or changes in demographics can affect the demand for goods and services.

#### **Step 4: Conclusion.**

Thus, demand is influenced by the price of the good itself and other external factors such as income, tastes, and related goods.

#### **Final Answer:**

Demand is the quantity of a good that consumers are willing to buy at various prices, and is influenced

# Quick Tip

Demand is not only affected by the price of the good but also by income, preferences, and external factors like substitutes and complements.

Q26. Explain the 'Laws of Return to Scale' with diagram.

#### **Solution:**

## **Step 1: Define Returns to Scale.**

Returns to scale refers to the change in output when all inputs in production are increased by the same proportion. It describes how the output changes when a firm increases its scale of production.

### **Step 2: Types of Returns to Scale.**

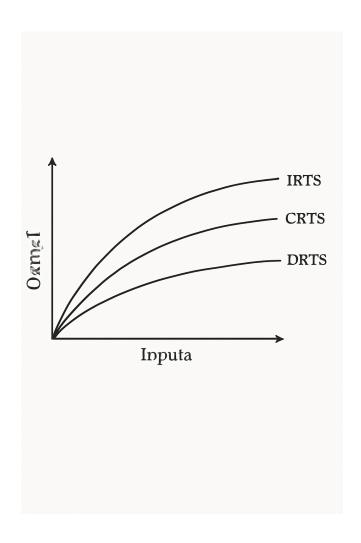
There are three types of returns to scale: - \*\*Increasing Returns to Scale:\*\* This occurs when output increases by a greater proportion than the increase in inputs. It happens due to increasing efficiency and the ability to exploit economies of scale. For example, doubling inputs might more than double the output. - \*\*Constant Returns to Scale:\*\* This occurs when output increases by the same proportion as the increase in inputs. In this case, the firm experiences no change in efficiency as the scale of production increases. - \*\*Decreasing Returns to Scale:\*\* This occurs when output increases by a smaller proportion than the increase in inputs. This is often due to inefficiencies that arise as the firm grows larger.

#### Step 3: Diagram.

In a typical diagram showing returns to scale, the x-axis represents the scale of inputs, and the y-axis represents the output. - The curve for \*\*increasing returns to scale\*\* is upward sloping at an increasing rate. - The curve for \*\*constant returns to scale\*\* is a straight, upward-sloping line. - The curve for \*\*decreasing returns to scale\*\* flattens as output increases.

#### **Step 4: Conclusion.**

Thus, returns to scale help explain how a firm's output responds to changes in its inputs and whether it experiences efficiency gains or losses as it expands production.



### **Final Answer:**

Returns to scale describes how output changes as inputs are increased proportionally.

# Quick Tip

Increasing returns to scale occur when output increases more than input, while decreasing returns happen when output increases less.

### OR

Q26 (Alternative). Describe different concepts of National Income in India.

### **Solution:**

#### **Step 1: Define National Income.**

National income is the total value of all goods and services produced by the residents of a country during a specific time period, typically measured annually. It is used to assess the economic performance of a country.

### **Step 2: Concepts of National Income in India.**

India, like other countries, uses several measures to assess national income, the most common of which are: - \*\*Gross Domestic Product (GDP):\*\* The total value of goods and services produced within the country's borders in a given period, without considering income earned by residents abroad. - \*\*Gross National Product (GNP):\*\* GDP plus the net income earned by residents from abroad, i.e., income received from foreign investments minus income paid to foreign nationals. - \*\*Net National Product (NNP):\*\* GNP minus depreciation (the loss in value of capital assets). - \*\*National Income (NI):\*\* The total income earned by the residents of the country, which is also the sum of wages, rents, interests, and profits. It excludes income earned by foreign nationals within the country. - \*\*Per Capita Income:\*\* The average income per person, calculated by dividing the national income by the total population.

### Step 3: Conclusion.

Thus, national income in India is measured using several concepts that reflect different aspects of economic activity, such as GDP, GNP, NNP, and Per Capita Income.

#### **Final Answer:**

National income concepts in India include GDP, GNP, NNP, and Per Capita Income, which reflect diffe

#### Quick Tip

The different concepts of national income help in analyzing the economic output and well-being of a country.

**Q27.** Describe the characteristics of 'Perfectly Competitive Market'. Explain the determination of price in such market.

#### **Solution:**

#### Step 1: Characteristics of a Perfectly Competitive Market.

A perfectly competitive market is a theoretical market structure where the following conditions hold: - \*\*Large Number of Buyers and Sellers:\*\* There are so many buyers and sellers in the market that no single buyer or seller can influence the market price. - \*\*Homogeneous Products:\*\* All firms produce identical or homogeneous products, so consumers cannot differentiate between the goods of different producers. - \*\*Free Entry and Exit:\*\* Firms can freely enter or exit the market without restrictions. This ensures that firms cannot earn long-term economic profits. - \*\*Perfect Knowledge:\*\* All buyers and sellers have complete knowledge about prices, products, and production techniques, ensuring informed decision-making. - \*\*No Government Intervention:\*\* There is no government intervention in the form of taxes, subsidies, or price controls in a perfectly competitive market.

#### Step 2: Price Determination in a Perfectly Competitive Market.

In a perfectly competitive market, the price is determined by the forces of supply and demand. Since firms are price takers, they accept the market price as given. The price determination process involves: - \*\*Market Supply and Demand:\*\* The intersection of the market supply curve (which shows the total quantity of goods firms are willing to produce at each price) and the market demand curve (which shows the total quantity of goods consumers are willing to buy at each price) determines the equilibrium price. - \*\*Firm's Supply Curve:\*\* In the short run, a firm's supply curve is its marginal cost curve above the average variable cost (AVC) curve. In the long run, firms can adjust all inputs, and the price tends to equal the minimum point of the long-run average cost (LRAC) curve. - \*\*Profit Maximization:\*\* Firms will adjust production to the point where marginal cost (MC) equals marginal revenue (MR), which, in a perfectly competitive market, is equal to the price (P).

#### **Step 3: Conclusion.**

Thus, in a perfectly competitive market, the price is determined by the intersection of supply and demand, with firms accepting this price as given and adjusting their output accordingly.

#### **Final Answer:**

In a perfectly competitive market, price is determined by the intersection of supply and demand, and fir

In perfect competition, firms are price takers, meaning they must accept the market price and adjust production accordingly.

#### OR

**Q27** (**Alternative**). Discuss the effect of upward shifting of Demand and Supply curve on equilibrium price and quantity.

#### **Solution:**

### Step 1: Understand the demand and supply curves.

- \*\*Demand Curve:\*\* Represents the relationship between the price of a good and the quantity demanded, with a negative slope (i.e., as price decreases, quantity demanded increases). - \*\*Supply Curve:\*\* Represents the relationship between the price of a good and the quantity supplied, with a positive slope (i.e., as price increases, quantity supplied increases).

## Step 2: Effect of an Upward Shift in the Demand Curve.

An upward shift in the demand curve means that at every price level, consumers are willing to buy more of the good. This can be due to factors such as increased income, changes in consumer preferences, or external factors like seasonal demand. The effects of the shift are: - \*\*Equilibrium Price:\*\* The equilibrium price will rise because the higher demand puts pressure on the price level to increase. - \*\*Equilibrium Quantity:\*\* The quantity of the good exchanged in the market will also increase because producers respond to higher prices by supplying more.

## Step 3: Effect of an Upward Shift in the Supply Curve.

An upward shift in the supply curve means that at every price level, producers are willing to supply more of the good. This shift could occur due to technological improvements, reduction in production costs, or favorable government policies. The effects are: \*\*Equilibrium Price:\*\* The equilibrium price will fall as the supply of goods increases, putting downward pressure on the price level. - \*\*Equilibrium Quantity:\*\* The quantity of

the good exchanged will increase because there is more supply in the market at lower prices, encouraging consumption.

# **Step 4: Conclusion.**

In summary, an upward shift in the demand curve increases both the equilibrium price and quantity, while an upward shift in the supply curve increases equilibrium quantity but decreases the equilibrium price.

### **Final Answer:**

An upward shift in demand increases both price and quantity, while an upward shift in supply increases

# Quick Tip

Shifts in the demand and supply curves cause changes in equilibrium price and quantity, with demand shifts affecting both, and supply shifts affecting price inversely.