

Bihar Assistant Professor Economics Sample Paper

Q1. Which of the following is measured by the Samuelson-Holt formula?

- (a) Consumer's surplus
- (b) Consumer's Equilibrium
- (c) Marginal utility
- (d) Elasticity of demand

Ans.(d)

Sol. Correct Answer: (d) Elasticity of demand

The Samuelson-Holt formula is a specific concept in economics that relates to the measurement of elasticity of demand.

Information Booster:

The Samuelson-Holt formula is used to calculate the point elasticity of demand from a given demand function. It provides a method to compute elasticity at a specific point on the demand curve.

The formula is expressed as:

$$E_d = \frac{dQ}{dP} \times \frac{P}{Q}$$

where E_d is the price elasticity of demand, dQ/dP is the derivative of quantity with respect to price, and P and Q are the price and quantity.

This formula is attributed to **Paul Samuelson** and **Charles Holt**, who contributed to the refinement of elasticity measurement in economic theory.

Additional Knowledge:

Options (a), (b), and (c) are incorrect:

- (a) Consumer's surplus is measured using the area under the demand curve and above the price line.
- (b) Consumer's equilibrium is achieved where the budget line is tangent to the indifference curve (in ordinal utility theory) or where MU/P is equal for all goods (in cardinal utility theory).
- (c) Marginal utility is the additional utility from consuming one more unit of a good.

Q2. For a Giffen good, the price elasticity of demand is:

- (a) Negative
- (b) Zero
- (c) Greater than one
- (d) Positive

Ans.(d)

Sol. Correct Answer: (d) Positive

Explanation:

When the price of a Giffen good increases, the demand also increases, because the income effect (i.e., consumers' real income effectively decreases) outweighs the substitution effect.

This results in a **positive price elasticity of demand**, meaning demand increases when the price increases.

Information Booster:

Giffen good is a special type of inferior good that violates the **law of demand**. Normally, as the price of a good rises, the quantity demanded decreases, but for Giffen goods, the opposite happens.

Historical example of Giffen goods include bread during periods of economic hardship where it was a staple food. As the price of bread rose, people could no longer afford meat and other substitutes, so they bought more bread.

Additional Knowledge:

Option (a) Negative: Incorrect. For most goods, price elasticity of demand is **negative** (inverse relationship between price and demand).

Option (b) Zero: Incorrect. Zero elasticity indicates that **quantity demanded doesn't change** with price changes, which is not applicable for Giffen goods.

Option (c) Greater than one: Incorrect. **Greater than 1** indicates elastic demand, but **Giffen goods** have **positive inelastic demand**.

Q3. The demand function for a good is given by $Q_d = 80 - 4P$. Calculate the Price Elasticity of Demand (Point Method) when the price (P) is ₹15.

- (a) Elastic
- (b) Inelastic
- (c) Unitary
- (d) Less than one

Ans.(a)

Sol.

Correct Option: A. Elastic

Solution: The formula for point elasticity of demand (E_d) is: $E_d = \frac{dQ_d}{dP} \times \frac{P}{Q_d}$

1. Find the derivative:

$$Q_d = 80 - 4P$$

$$\frac{dQ_d}{dP} = \frac{d(80 - 4P)}{dP} = -4$$

2. Find the quantity demanded (Q_d) at P = 15:

$$Q_d = 80 - 4 \times 15$$

$$Q_d = 80 - 60 = 20 \text{ units}$$

3. Calculate the Elasticity of Demand:

$$E_d = -4 \times \frac{15}{20}$$

$$E_d = -3$$

Conclusion: The Price Elasticity of Demand is -3. Since $E_d > 1$, the demand is elastic at this price.

Note: Elasticity of demand is always positive due to inverse relation between quantity demanded and price.

Q4. The demand curve for a good is given by $P = 20 - 2Q$, and the supply curve is $P = 4 + Q$. Calculate the consumer surplus when the equilibrium price is determined.

- (a) Rs 28.42
- (b) Rs 27

- (c) Rs 30
(d) Rs 58.27

Ans.(a)

Sol.

Correct Answer: Option (A) Consumer Surplus = ₹28.42

Solution:

Step 1: Find the equilibrium price and quantity

- **Given:** Demand Curve: $P = 20 - 2Q$, Supply Curve: $P = 4 + Q$
- **Solve for Q:**
 - $20 - 4 = 2Q + Q$
 - $16 = 3Q$
 - $Q = 3/16 = 5.33$
- Now substitute $Q = 5.33$ into either the demand or supply curve to find P. Let's use the supply curve:
 - $P = 4 + 5.33 = 9.33$
- Thus, the **equilibrium price (P) = ₹9.33**, and the **equilibrium quantity (Q) = 5.33 units**.

Step 2: Calculate the consumer surplus

- Consumer surplus is the area of the triangle formed under the demand curve and above the equilibrium price.
- The formula for consumer surplus is: $Consumer\ Surplus = \frac{1}{2} \times 5.33 \times 10.67$
- Where:
 - **Base** = equilibrium quantity ($Q = 5.33$)
 - **Height** = difference between the price consumers are willing to pay (from the demand curve at $Q = 0, P = 20$) and the equilibrium price ($P = 9.33$).
- So, the **height** is: $20 - 9.33 = 10.67$
- Now, calculate **Consumer Surplus**: $Consumer\ Surplus = \frac{1}{2} \times 5.33 \times 10.67 = 28.42$.

Q5. In a two-good (X and Y) world, if the Cross-Price Elasticity of Demand is positive, it implies that:

- (a) Good X is an inferior good.
(b) Goods X and Y are complements.
(c) Goods X and Y are substitutes.
(d) The demand for Good X is income inelastic.

Ans.(c)

Sol. Correct Option: C. Goods X and Y are substitutes.

Explanation:

Cross-price elasticity of demand measures the responsiveness of the quantity demanded of one good to a change in the price of another good.

This means when the price of Y increases, the quantity demanded of X increases — consumers switch from Y to X → substitutes (e.g., tea and coffee).

Additional Knowledge:

Negative cross-price elasticity: Complements (e.g., cars and petrol).

Zero cross-price elasticity: Unrelated goods.

Q6. Consider the following statements regarding Regional Rural Banks (RRBs) in India:

- (A) RRBs were set up on the basis of the recommendation of Narasimham working group, 1975
(B) The largest proportion of the equity of RRBs is held by its sponsor bank
(C) NABARD coordinates all the activities of RRBs
(D) RRBs are lead banks
(E) RRBs are provided refinance facilities through NABARD

Choose the correct answer from the options given below:

- (a) (A), (C), (E) only
- (b) (A), (B), (C), (D) only
- (c) (B), (C), (E) only
- (d) (A), (E) only

Ans.(a)

Sol. Correct Option: 1. (A), (C), (E) only

Explanation:

Regional Rural Banks (RRBs) were established to provide banking services in rural areas, especially to small and marginal farmers, agricultural laborers, and small entrepreneurs. They operate under a specific structure involving sponsorship by commercial banks and equity participation.

Information Booster:

- (A) RRBs were setup on the basis of the recommendation of Narasimham working group, 1975 – Correct. The Narasimham Working Group (1975) recommended the establishment of RRBs.
- (C) NABARD coordinates all the activities of RRBs – Correct. NABARD supervises, coordinates, and provides refinance support to RRBs.
- (E) RRBs are provided refinance facilities through NABARD – Correct. NABARD provides refinance support to RRBs for their lending activities.

Additional Knowledge:

- (B) The largest proportion of the equity of RRBs is held by its sponsor bank – Incorrect. The equity structure of RRBs is: Central Government (50%), Sponsor Bank (35%), State Government (15%). So the largest proportion is held by the Central Government, not the sponsor bank.
- (D) RRBs are lead Bank – Incorrect. The Lead Bank Scheme designates a commercial bank (like SBI, PNB, etc.) as the lead bank in a district, not RRBs.

Q7. Repo rate is the interest rate at which:

- (a) The commercial banks borrow from the RBI
- (b) The commercial banks borrow from the other commercial banks
- (c) The commercial banks deposit money to the RBI
- (d) The common people deposit money to the RBI

Ans.(a)

Sol. Correct Option: (A) The commercial banks borrow from the RBI

Explanation:

The Repo Rate is a key monetary policy instrument used by the Reserve Bank of India (RBI). "Repo" stands for Repurchase Agreement, where banks borrow money from the RBI by selling securities with an agreement to repurchase them later at a predetermined price.

Information Booster:

1. Repo Rate is the rate at which the RBI lends short-term funds to commercial banks.
2. Banks provide government securities as collateral.
3. It helps manage liquidity in the banking system and signals the RBI's monetary policy stance.
4. An increase in repo rate makes borrowing costlier for banks, reducing money supply; a decrease does the opposite.

Additional Knowledge:

1. Option (B) Commercial banks borrow from other commercial banks → This refers to the Call Money Market, not the repo rate.
2. Option (C) Commercial banks deposit money to the RBI → This describes the Reverse Repo Rate, where banks park excess funds with the RBI.
3. Option (D) Common people deposit money to the RBI → Incorrect; RBI does not accept deposits from the general public.

Q8. The expert committee set up by RBI in 2013 to revise and strengthen the monetary policy framework in India was chaired by:

- (a) Raghuram Rajan
- (b) Urjit Patel
- (c) Deepak Mohanty
- (d) Michael Patra

Ans.(b)

Sol. Correct Option: (B) Urjit Patel

Explanation:

In 2013, the RBI set up an Expert Committee to Revise and Strengthen the Monetary Policy Framework in India. This committee's recommendations led to major changes in India's monetary policy structure, including the adoption of Flexible Inflation Targeting (FIT).

Information Booster:

1. The committee was formed in September 2013.
2. It was chaired by Dr. Urjit Patel, who was then a Deputy Governor of the RBI.
3. The Urjit Patel Committee Report (2014) recommended:
4. Making inflation targeting the primary objective of monetary policy.
5. Using Consumer Price Index (CPI) as the anchor.
6. Setting up a Monetary Policy Committee (MPC) for interest rate decisions.
7. These recommendations were largely implemented, and the RBI Act was amended in 2016 to adopt the FIT framework.

Additional Knowledge:

1. **Option (A) Raghuram Rajan** – He was the RBI Governor at that time, but not the chair of this specific committee.
2. **Option (C) Deepak Mohanty** – He chaired a Committee on Medium-term Path on Financial Inclusion (2015), not the monetary policy framework committee.
3. **Option (D) Michael Patra** – He is a current Deputy Governor and MPC member, but he did not chair the 2013 committee.

Q9. Which of the followings are correct?

- (A) $M1 = C + DD + OD$
- (B) $M2 = M1 + \text{saving deposits with post office saving banks}$
- (C) $M3 = M2 + \text{net time deposits of banks}$
- (D) $M3 = M1 + \text{net time deposits of banks}$
- (E) $M4 = M1 + \text{total deposits with the post office savings}$

Choose the correct answer from the options given below:

- (a) (A), (B) and (C) only
- (b) (A), (B) and (D) only
- (c) (C) and (E) only
- (d) (B), (D) and (E) only

Ans.(b)

Sol. Correct Option: 2. (A), (B) and (D) only

Explanation:

The monetary aggregates in India (M_1 , M_2 , M_3 , M_4) are defined by the RBI based on the recommendations of the Second Working Group on Money Supply (1977).

These definitions help in measuring the money supply with different levels of liquidity.

Information Booster:

(A) $M_1 = C + DD + OD \rightarrow$ Correct.

C = Currency held by public, DD = Demand deposits in banks, OD = Other deposits with RBI.

(B) $M_2 = M_1 +$ Saving deposits with post office saving banks \rightarrow Correct.

(D) $M_3 = M_1 +$ Net time deposits of banks \rightarrow Correct.

M_3 is also known as broad money.

Additional Knowledge:

(C) $M_3 = M_2 +$ Net time deposits of banks \rightarrow Incorrect.

$M_3 = M_1 +$ Net time deposits, not M_2 .

(E) $M_4 = M_1 +$ Total deposits with the post office savings \rightarrow Incorrect.

$M_4 = M_3 +$ Total deposits with post office savings organization (not M_1).

Q10. Which among the following committees were set up for Banking Sector Reforms in India?

- (A) Narasimham Committee
- (B) Usha Thorat Committee
- (C) Nachiket Mor Committee
- (D) R. H. Khan Committee
- (E) Aditya Puri Committee

Choose the correct answer from the options given below:

- (a) (A), (B), and (C) only
- (b) (A), (C), and (D) only
- (c) (B), (D), and (E) only
- (d) (A), (B), and (D) only

Ans.(d)

Sol. Correct Option: 4. (A), (B), and (D) only

Explanation:

Banking sector reforms in India have been driven by various committees appointed by the RBI and the Government of India. These committees have addressed issues like financial stability, prudential norms, inclusion, and technological advancement.

Information Booster:

(A) Narasimham Committee – Formed in 1991 (Narasimham Committee I) and again in 1998 (Narasimham Committee II), it laid the foundation for banking sector reforms, including capital adequacy, NPAs, and competition.

(B) Usha Thorat Committee – Formed in 2010, it reviewed the presence of foreign banks in India and financial stability implications.

(D) R. H. Khan Committee – Formed in 2015, it reviewed the working of the Priority Sector Lending (PSL) guidelines, including targets for foreign bank

Additional Knowledge:

(C) Nachiket Mor Committee – Formed in 2013, it focused on Comprehensive Financial Services for Small Businesses and Low-Income Households, not broad banking sector reforms.

(E) Aditya Puri Committee – Not a standard RBI/Government banking reform committee; Aditya Puri was MD of HDFC Bank, but no major national banking reform committee is named after him.

Q11. The ____ effect implies that nominal interest rates tend to be high when inflation is high and low when inflation is low?

- (a) Tobin effect
- (b) Baumol effect
- (c) Fisher effect
- (d) Patinkin effect

Ans.(c)

Sol. Correct Answer (c) Fisher effect

Explanation: The Fisher effect explains the relationship between nominal interest rates, real interest rates, and inflation. The Fisher effect correctly describes the relationship between inflation and nominal interest rates. As inflation increases, nominal rates rise to maintain the real interest rate.

Information Booster: According to this theory, nominal interest rates tend to be high when inflation is high and low when inflation is low. This is because the nominal interest rate is the sum of the real interest rate and expected inflation. When inflation rises, lenders demand a higher nominal interest rate to maintain their desired real return, which causes nominal rates to rise with inflation. Conversely, when inflation is low, nominal interest rates also tend to decrease.

Additional Knowledge:

The Tobin effect refers to the effect of interest rates on the demand for assets, especially in the context of portfolio diversification. It is unrelated to the relationship between inflation and nominal interest rates.

The Baumol effect focuses on the cost of holding cash and how individuals and firms manage cash balances. It does not explain the connection between inflation and nominal interest rates.

The Patinkin effect is an economic theory that relates to the relationship between income, consumption, and liquidity in an economy. It does not explain the relationship between inflation and nominal interest rates.

Q12. Arrange the following theories in correct chronological order, starting from the earliest to latest:

- (A) Patinkin's Real Balance Effect
- (B) Reformulated quantity theory of money
- (C) Baumol's theory of money
- (D) Cash transaction approach
- (E) Cash balance approach

Choose the correct answer from the options given below:

- (a) (D), (E), (B), (C), (A)
- (b) (E), (D), (A), (B), (C)
- (c) (E), (D), (C), (B), (A)
- (d) (C), (D), (E), (A), (B)

Ans.(a)

Sol. Correct Option:1 (D), (E), (B), (C), (A)

Explanation:

The theories of money have evolved from the classical focus on money purely as a medium of exchange to modern theories that view money as a store of value and part of a broader asset portfolio.

This evolution begins with Irving Fisher's classical equation and moves through the Cambridge school, leading to post-Keynesian and Monetarist developments.

Information Booster:

Cash Transaction Approach (D): Proposed by Irving Fisher in *The Purchasing Power of Money* (1911). It focused on the velocity of money in transactions ($MV=PT$).

Cash Balance Approach (E): Developed by Cambridge Economists (Marshall, Pigou) formally around 1917 (Pigou's *The Value of Money*). It shifted focus to the demand for holding money balances ($M=kPY$).

Reformulated Quantity Theory (B): Proposed by Milton Friedman in 1956 (*The Quantity Theory of Money: A Restatement*). He treated money demand as a portfolio choice, distinct from the transaction view.

Baumol's Theory of Money (C): Proposed by William J. Baumol in 1952. It applied inventory theoretic approaches to the transaction demand for money, often grouped with post-Keynesian refinements.

Patinkin's Real Balance Effect (A): Fully detailed by Don Patinkin in *Money, Interest, and Prices* (1956). It integrated monetary and value theory, showing how real balances affect aggregate demand.

Additional Knowledge:

Flow vs. Stock: Fisher's approach (D) is a flow concept (money in motion), while the Cambridge approach (E) is a stock concept (money at rest/held).

Real Balance Effect: Patinkin used this mechanism to argue that a fall in the price level increases the real value of money holdings, thereby stimulating consumption and restoring full employment, countering the "Liquidity Trap."

Note on B & C: While Baumol (1952) is chronologically before Friedman (1956), Option (1) places Friedman (B) before Baumol (C). In multiple-choice exams, one must choose the "best fit" option that respects the primary chronological anchors (Fisher → Cambridge).

Q13. Arrange the following business cycles in ascending order in terms of their approximate duration.

- (a) Kondratiev cycle
- (b) Kitchin cycle

- (c) Jugular cycle
(d) Kuznets cycle

Choose the correct answer from the options given below

- (a) C, B, A, D
(b) B, C, D, A
(c) A, C, B, D
(d) D, A, C, B

Ans.(b)

Sol. Correct Answer: (b) B, C, D, A

Explanation: Business cycles in economics are classified based on their duration and the specific economic factors that trigger them. Joseph Schumpeter famously integrated these varying cycles into a single framework.

Information Booster:

- Kitchin Cycle (B): This is the shortest cycle, typically lasting 3 to 5 years. It is primarily attributed to fluctuations in inventory investment and adjustments by businesses.
- Juglar Cycle (C): Often referred to as "the" business cycle, it lasts approximately 7 to 11 years. It is linked to fluctuations in fixed capital investment (such as machinery and factories).
- Kuznets Cycle (D): Lasting between 15 and 25 years, these are "long swings" associated with infrastructural investment, building cycles, and demographic changes.
- Kondratiev Cycle (A): Also known as "Long Waves," these cycles last 40 to 60 years. They are driven by major technological innovations (e.g., steam power, electricity, or information technology) that fundamentally reshape the economy.

Additional Knowledge:

Type of Cycle	Economist
1. Kondratiev Cycle	Nikolai Kondratiev (1920)
2. Kitchin Cycle	Joseph Kitchin (1923)
3. Juglar Cycle	Clement Juglar
4. Kuznets Cycle	Simon Kuznets

Q14. Match List I with List II:

List I (Monetary policy regime)	List II (Periods)
A. Fiscal dominance	I. 2016 onwards
B. Multiple indicator approach	II. 1951-1985
C. Monetary targeting with feedbacks	III. 1998-2016
D. Flexible inflation targeting	IV. 1985-1998

Choose the correct answer from the options given below:

- (a) A-III, B-IV, C-II, D-I
(b) A-II, B-III, C-IV, D-I
(c) A-II, B-I, C-IV, D-III
(d) A-IV, B-III, C-I, D-II

Ans.(b)

Sol. Correct Option : B [A-II, B-III, C-IV, D-I]

Explanation:

The matching of monetary policy regimes in India with their respective periods is as follows:

- (a) Fiscal dominance → II. 1951-1985
- (b) Multiple indicator approach → III. 1998-2016
- (c) Monetary targeting with feedbacks → IV. 1985-1998
- (d) Flexible inflation targeting → I. 2016 onwards

Information Booster:

Fiscal dominance (1951-1985): Characterized by high government borrowing from the RBI, leading to inflationary pressures.

Monetary targeting with feedbacks (1985-1998): Aimed at controlling money supply to curb inflation, with flexibility for growth needs.

Multiple indicator approach (1998-2016): Shifted to a broader set of indicators for a more holistic policy assessment.

Flexible inflation targeting (2016 onwards): Formalized by the Monetary Policy Framework Agreement, making price stability the key goal.

Additional Knowledge:

Option 1 (A-III, B-IV, C-II, D-I) is incorrect as it misplaces fiscal dominance and monetary targeting.

Option 3 (A-II, B-I, C-IV, D-III) is wrong as multiple indicator approach did not start in 2016.

Option 4 (A-IV, B-III, C-I, D-II) is incorrect as flexible inflation targeting began in 2016, not earlier.

Q15. Match List I with List II

List I (Concepts)	List II (Given by)
A. Paradox of thrift	I. K. Boulding
B. Water-Diamond paradox	II. A. C. Pigou
C. Wage employment paradox	III. J. M. Keynes
D. Macroeconomic paradox	IV. Adam Smith

Choose the correct answer from the options given below:

- (a) A-II, B-I, C-III, D-IV
- (b) A-I, B-II, C-III, D-IV
- (c) A-III, B-IV, C-II, D-I
- (d) A-III, B-IV, C-I, D-II

Ans.(c)

Sol. Correct Option: C [A-III, B-IV, C-II, D-I]

Explanation:

(a) Paradox of thrift: This concept, which argues that an increase in saving can lead to a decrease in overall economic growth, is a central idea in J.M. Keynes's general theory.

(b) Water-Diamond paradox: The puzzle of why water, essential for life, is cheap while diamonds, a luxury, are expensive was famously discussed by Adam Smith in his work *The Wealth of Nations*.

(c) Wage employment paradox: This paradox, which suggests that a reduction in money wages might not necessarily increase employment, is associated with the work of A.C. Pigou and the classical school of thought.

(d) Macroeconomic paradox: The idea that what is true for a part may not be true for the whole, or that microeconomic principles do not always scale up to the macro level, is attributed to K. Boulding.

Information Booster:

The Paradox of Thrift is a counter-intuitive principle from Keynesian economics.

The Water-Diamond Paradox was solved by the marginalist revolution, which introduced the concept of marginal utility.

Additional Knowledge:

The Paradox of thrift highlights a fundamental difference between microeconomic and macroeconomic thinking.

A single individual saving more may be good for them, but if everyone saves more simultaneously, it can lead to a fall in aggregate demand and thus, a recession.

Q16. Match List-I with List-II:

List-I	List-II
A. Income induced adjustment process of balance of payments	I. Paul Samuelson
B. Absorption approach of BoPs	II. Keynes, J.M.
C. Impossible trinity	III. Sidney S. Alexander
D. Factor price equalization theorem	IV. Mundell-Fleming

Choose the correct answer from the options given below:

- (a) A-I, B-II, C-III, D-IV
- (b) A-II, B-III, C-IV, D-I
- (c) A-II, B-III, C-I, D-IV
- (d) A-I, B-I, C-III, D-IV

Ans.(b)

Sol. Correct Option: B [A-II, B-III, C-IV, D-I]

Information Booster:

Income induced adjustment process of balance of payments (A-II): This theory is associated with J.M. Keynes. It suggests that a balance of payments deficit or surplus will trigger changes in national income which, in turn, will correct the disequilibrium. For example, a deficit reduces income, leading to a fall in imports and a correction of the deficit.

Absorption approach of BoPs (B-III): This approach was developed by Sidney S. Alexander. It states that a country can only improve its balance of payments by increasing its total output relative to its absorption (domestic spending).

Impossible trinity (C-IV): This concept, also known as the "trilemma," is associated with the Mundell-Fleming model. It states that a country cannot simultaneously have a fixed exchange rate, free capital movement, and an independent monetary policy. A country can only choose two of these three.

Factor price equalization theorem (D-I): This theorem is part of the Heckscher-Ohlin model of international trade, and it was formalized by Paul Samuelson. It states that international trade will lead to the equalization of factor prices (e.g., wages and returns on capital) between countries, even in the absence of factor mobility.

Additional Knowledge:

The impossible trinity is a key concept in open-economy macroeconomics. The Mundell-Fleming model analyzes the short-run relationship between an economy's exchange rate, interest rate, and output.

The absorption approach was an alternative to the elasticity approach to balance of payments adjustment.

Q17. Match List-I with List-II.

List-I	List-II
(A) Ad Valorem Tariff	(I) Fixed sum per unit
(B) Autarky	(II) Combination of Ad Valorem and specific tariff
(C) Compound Tariff	(III) No trade with other countries
(D) Specific Tariff	(IV) A percentage of the value of the traded commodity

Choose the correct answer from the options given below:

- (a) (A)-(I), (B)-(III), (C)-(II), (D)-(IV)
- (b) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (c) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)
- (d) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)

Ans.(b)

Sol. Correct Answer: 2. (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

Explanation: Correct Match Table

List - I (Concept)	List - II (Definition)
(A) Ad Valorem Tariff	(IV) A percentage of the value of the traded commodity
(B) Autarky	(III) No trade with other countries
(C) Compound Tariff	(II) Combination of Ad Valorem and specific tariff
(D) Specific Tariff	(I) Fixed sum per unit

Information Booster:

(A) Ad Valorem Tariff: Derived from the Latin phrase meaning "according to value," this is a tax levied as a fixed percentage of the value of the imported good (e.g., a 10% duty on imported cars).

(B) Autarky: A state of economic self-sufficiency where a country does not engage in international trade, producing everything it needs domestically (closed economy).

(C) Compound Tariff: A trade duty that combines both a specific tariff and an ad valorem tariff on the same product (e.g., \$10 per ton plus 5% of the value). This is often used to provide protection against both cheap raw material imports and value fluctuations.

(D) Specific Tariff: A fixed monetary fee levied per physical unit of the imported good, regardless of its price (e.g., \$5 per barrel of oil).

Q18. In the product cycle model of International trade, in which stage the imitating country starts underselling the innovating country in third markets?

- (a) Stage -II
- (b) Stage -III
- (c) Stage -IV
- (d) Stage -V

Ans.(c)

Sol. Correct Answer: C [Stage III]

Explanation

The Product Cycle Model developed by Raymond Vernon outlines the stages of a product's life cycle in international trade, typically focusing on the dynamic between innovating and imitating countries.

Information Booster:

The Product Cycle Model explains how trade patterns evolve with the development of a product, from innovation to imitation and eventual commoditization.

In Stage-III, the imitating country begins to export to third markets, offering the same product at a lower price due to cheaper labor or more efficient production methods.

This cycle demonstrates how global trade shifts as products move from innovation to standardization and widespread production.

Additional Information:

Stage-I: The innovating country (usually developed) develops the product, and it is introduced in the domestic market.

Stage-II: The product is then exported to other developed countries, usually those with similar income levels.

Stage-IV: The imitating country continues to improve its technology, and the product may become commoditized, making it more difficult for the innovating country to maintain its market share.

Stage-V: The product is now mature and is produced and exported by the imitating country to various international markets, potentially taking over the original innovating country's market.

Q19. Arrange the following theories in correct chronological order, starting from the earliest to latest:

- (A) Absorption approach
- (B) Factor Price Equalisation theory
- (C) Reciprocal Dumping Model
- (D) Leontief Paradox
- (E) Immiserizing Growth Theory

Choose the correct code from the following;

- (a) (B), (A), (D), (E), (C)
- (b) (D), (A), (B), (C), (E)
- (c) (E), (D), (B), (A), (C)
- (d) (D), (A), (C), (E), (B)

Ans.(a)

Sol. Correct Answer: (a) (B), (A), (D), (E), (C)

Explanation:

The correct chronological order of the trade theories is as follows:

Factor Price Equalisation Theory (B): While the Heckscher-Ohlin model dates to the 1930s, Paul Samuelson rigorously proved the FPE theorem in 1948. It is a fundamental corollary of the H-O theory.

Absorption Approach (A): Proposed by Sidney Alexander in 1952, this approach analyzes the Balance of Payments in relation to national income and domestic absorption.

Leontief Paradox (D): Wassily Leontief published his famous findings in 1953 (using 1947 data), challenging the validity of the H-O theory for the US economy.

Immiserizing Growth Theory (E): Formulated by Jagdish Bhagwati in 1958, describing a situation where growth leads to a deterioration in terms of trade that outweighs the gains.

Reciprocal Dumping Model (C): Developed by Brander and Krugman in 1983, this is a cornerstone of "New Trade Theory," incorporating imperfect competition.

Information Booster:

Leontief Paradox: It revealed that despite being capital-abundant, the U.S. exported labor-intensive goods and imported capital-intensive goods, contradicting the Heckscher-Ohlin theorem.

Absorption Equation: Defined as $B = Y - A$, where B is the trade balance, Y is national income, and A is total domestic absorption ($C + I + G$). It suggests devaluation only works if it increases income or reduces absorption.

Immiserizing Growth: This phenomenon is most likely to occur in developing nations when export demand is inelastic, causing a sharp drop in terms of trade.

Reciprocal Dumping: Occurs in oligopolistic markets where firms sell goods in each other's markets at prices lower than domestic prices to capture market share, often leading to two-way trade in identical products.

Q20. Match List I with List II

List I	List II
A. Specific factors model	I. Prebisch-Singer hypothesis
B. Immiserizing growth	II. Thomas Mun
C. Mercantilism theory of international trade	III. Jagdish Bhagwati
D. Secular deterioration of terms of trade	IV. Paul Samuelson and Ronald Jones

Choose the correct answer from the options given below:

- (a) A-III, B-IV, C-II, D-I
- (b) A-IV, B-III, C-II, D-I
- (c) A-IV, B-II, C-III, D-I
- (d) A-II, B-IV, C-I, D-III

Ans.(b)

Sol. Correct Option: B [A-IV, B-III, C-II, D-I]

Information Booster:

A. Specific factors model: This model was developed by Paul Samuelson and Ronald Jones. It explains the effects of trade on factor income, assuming some factors are specific to certain industries in the short run..

B. Immiserizing growth: This concept, where a country's economic growth can lead to a decline in its terms of trade and national welfare, was developed by Jagdish Bhagwati.

C. Mercantilism is an economic theory that advocates for a country to maximize its exports and minimize its imports. Thomas Mun was a prominent English mercantilist writer

D. Secular deterioration of terms of trade: This is the hypothesis that the terms of trade for developing countries tend to decline over time. This idea is associated with the Prebisch- Singer hypothesis..

Additional Knowledge:

The Specific Factors Model is an extension of the Ricardian and Heckscher-Ohlin models, providing a more realistic short-run framework by allowing for a mix of mobile and immobile factors. It is useful for explaining the short-run distributional effects of trade.

The concept of Immiserizing Growth is a powerful counter-argument to the idea that economic growth is always beneficial. It highlights a potential negative consequence of trade, particularly for large countries that can influence world prices.

Mercantilism dominated economic thought from the 16th to the 18th centuries. It was a precursor to modern economic thought and was later criticized by classical economists like Adam Smith, who advocated for free trade.

The Prebisch-Singer Hypothesis has been a major topic of debate in development economics, with some empirical evidence supporting it and other studies suggesting the opposite. It has been a basis for calls for a "New International Economic Order" and for policies to help developing countries diversify their exports.

Q21. Match List-I with List-II:

List-I	List-II
(A) PQLI	(I) Amartya Sen
(B) HDI	(II) Mehabub-Ul-Haque
(C) Capability Approach to Development	(III) Alkire and Foster
(D) Multi-Dimensional Poverty Index	(IV) Morris D. Morris

Choose the correct code from the following:

- (a) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)
- (b) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (c) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (d) (A)-(I), (B)-(III), (C)-(II), (D)-(IV)

Ans.(a)

Sol. Correct option (A)

Information Booster:

1. PQLI (A), or the Physical Quality of Life Index, is associated with Morris D. Morris (IV). It was introduced to measure the quality of life or well-being of a country, focusing on life expectancy, infant mortality, and basic literacy.
2. HDI (B), or the Human Development Index, was developed by Mehabub-Ul-Haque (III) and is a composite statistic of life expectancy, education, and per capita income indicators, which are used to rank countries into four tiers of human development.
3. Capability Approach to Development (C) was developed by Amartya Sen (I), who argued that development should be about enhancing the capabilities of individuals and expanding their freedoms rather than just increasing economic wealth.
4. Multi-Dimensional Poverty Index (D) is linked to Alkire and Foster (II), who developed this index as a measure of poverty that looks at various deprivations in education, living standards, and health.

Q22. According to Rostow, any industry can play the role of leading sector in the take-off stage provided following conditions are met.

- (a) The market for the product is expanding rapidly
- (b) The leading sector generate secondary expansion
- (c) The sect has an adequate and continual supply of capital from ploughed-back profits.
- (d) Introduction of new techniques into the sector to increase productivity
- (e) Changes in industrial structure should be structural ones

Choose the most appropriate answer from the options given below:

- (a) B, C, D and E only

- (b) A, D and E only
- (c) A, C and D only
- (d) A, B, C and D only

Ans.(d)

Sol. Correct Option: D

Explanation: According to Rostow's model of economic growth, a "leading sector" is a key driver of the "take-off" stage. The conditions that make a sector a "leading sector" are:

- A. The market for the product is expanding rapidly: This is essential for the sector to grow and pull other sectors with it.
- B. The leading sector generates secondary expansion: This refers to the creation of backward and forward linkages, where the leading sector stimulates growth in industries that supply it (backward) and industries that use its products (forward).
- C. The sector has an adequate and continual supply of capital from ploughed-back profits: The sector must be self-sustaining, generating its own investment.
- D. Introduction of new techniques into the sector to increase productivity: Technological innovation is a critical component of the take-off.

Information Booster:

Rostow's Stages of Economic Growth: A historical model of development that identifies five stages: Traditional Society, Preconditions for Take-off, Take-off, Drive to Maturity, and Age of High Mass Consumption.

Additional Knowledge:

The "leading sector" concept is central to the "take-off" stage, which is described as a period of rapid, self-sustaining industrial growth. The growth in this sector spreads to other parts of the economy through these linkages.

Q23. According to neoclassical growth theory, an increase in saving rate.

- (a) Raises the growth rate of output in the short run.
- (b) Increases long run growth rate of output.
- (c) Decreases the steady-state capital-labor ratio.
- (d) Decreases the long-run level of capital and output per head.

Ans.(a)

Sol. Correct Option: A [Raises the growth rate of output in the short run.]

Explanation:

According to neoclassical growth theory (Solow-Swan model), an increase in the saving rate leads to higher investment, which increases the capital stock and temporarily raises the growth rate of output in short run.

Information Booster:

The Solow model predicts that while saving rate changes affect the level of output per capita, they do not affect the long-run growth rate.

The long-run growth rate is driven by technological progress, which is exogenous.

A higher saving rate shifts the investment curve upward, leading to a new steady state with higher capital and output per worker.

Additional Knowledge:

Option 2 is incorrect because the long-run growth rate is unchanged.

Option 3 is incorrect because the steady-state capital-labor ratio increases.

Option 4 is incorrect because the long-run level of capital and output per head increases.

Q24. The idea of constructing poverty-weighted indices of growth is.

(a) To give at least equal weight to all income groups in society

(b) To achieve height growth rate.

(c) To facilitate foreign trade on equal basis.

(d) To assign more value or weight on income group of richest population and no weight on lower-income group.

Ans.(a)

Sol. Correct Option: A (To give at least equal weight to all income groups in society.)

Explanation: The concept of "poverty-weighted indices of growth" is an alternative approach to measuring economic development that goes beyond simply looking at the overall GDP growth rate.

Information Booster:

The idea is to assign greater weight to the income growth of the poor compared to that of the rich when calculating a growth index. The goal is to ensure that economic growth is pro-poor and inclusive, and not just concentrated among the wealthy.

This approach is a direct counterpoint to traditional growth measures that give equal weight to every rupee of income, regardless of who receives it. This means that a rupee of growth for a rich person has the same weight as a rupee of growth for a poor person. A poverty-weighted index aims to correct this.

Additional Knowledge:

The concept was developed to address the limitations of traditional GDP-based growth metrics, which can mask growing inequality. It is a normative measure that reflects a societal value judgment.

Q25. Arrange the following publications in chronological order starting from the oldest to the latest.

(a) "Theory of Economic growth" by Arthur Lewis

(b) "A Contribution to the Theory of Economic Growth" by Robert Solow

(c) "The Stages of Economic Growth: A Non Communist Manifesto" by Walt Rostow

(d) "Asian Drama: An Inquiry into the Poverty of Nations" By Gunnar Myrdal

(e) "Strategy of Economic Development" by Albert Hirschman

Choose the correct answer from the options given below:

(a) A, E, B, C, D

(b) E, B, C, D, A

(c) C, D, B, E, A

(d) A, B, E, C, D

Ans.(d)

Sol. Correct Answer: D [A, B, E, C, D]

Explanation: The correct chronological order of the publications is:

Additional Information:

The oldest publication is "Theory of Economic Growth" (1955) by Arthur Lewis (A).

Followed by Robert Solow's "A Contribution to the Theory of Economic Growth" (1956) (B).

"Strategy of Economic Development" by Albert Hirschman was published next in 1958 (E).

Walt Rostow's "The Stages of Economic Growth" came in 1960 (C).

Finally, Gunnar Myrdal's "Asian Drama" was released in 1968 (D).

Arthur Lewis's "Theory of Economic Growth" emphasized the dual economy model, focusing on the shift from agricultural economies to industrial ones.

Robert Solow's "A Contribution to the Theory of Economic Growth" introduced the Solow growth model, which integrates technological progress and capital accumulation.

Albert Hirschman's work on "Strategy of Economic Development" advocated for strategic investments and the importance of 'linkages' in economic development.

Walt Rostow's "The Stages of Economic Growth" proposed a model of development stages where countries transition from traditional societies to modern economies.

Gunnar Myrdal's "Asian Drama" analyzed the socio-economic development of Asian countries, noting the challenges posed by poverty and development.

Q26. In which agricultural year was India's first agriculture census carried out?

(a) 1950-51

(b) 1960-61

(c) 1970-71

(d) 1980-81

Ans.(c)

Sol. Correct Answer: C. 1970-71

Explanation:

The first comprehensive Agriculture Census in India was conducted with the agricultural year 1970-71 as the reference period.

It was part of the 1970 World Agricultural Census Programme sponsored by the Food and Agriculture Organization (FAO).

Since then, it has been conducted at intervals of every 5 years (quinquennially).

Information Booster

Conducted by: Department of Agriculture & Farmers Welfare, Ministry of Agriculture & Farmers Welfare.

Statistical Unit: The primary unit for data collection is the "Operational Holding" (land used wholly or partly for agricultural production and operated as one technical unit).

Three Phases: The census is typically conducted in three distinct phases: (I) Listing of holdings, (II) Detailed survey on irrigation/cropping, and (III) Input Survey.

Additional Information

Recent Census: The 11th Agriculture Census (2021-22) was launched in July 2022. It is the first time data collection is being done via smartphones and tablets.

1950 & 1960: During these years, data was collected through sample surveys by the National Sample Survey (NSS), but a complete census was not conducted.

Q27. Match List I with List II:

List I (Criteria of 15 th finance commission)	List II (Weights as per the recommendation of 15 th finance commission for horizontal devolution)
A. Income distance	I. 15%
B. Population	II. 12.5%
C. Demographic performance	III. 45%
D. Forest and Ecology	IV. 10%

Choose the correct answer from the options given below:

- (a) A-III, B-IV, C-I, D-II
- (b) A-II, B-I, C-III, D-IV
- (c) A-III, B-I, C-II, D-IV
- (d) A-I, B-IV, C-II, D-III

Ans.(c)

Sol. Correct Option: C [A-III, B-I, C-II, D-IV]

- A. Income Distance → III. 45%
- B. Population → I. 15%
- C. Demographic Performance → II. 12.5%
- D. Forest and Ecology → IV. 10%

Information Booster:

Income Distance aims to bridge the income disparity between states to promote equity in development. Population affects the share of resources allocated to states with higher populations. Demographic Performance addresses the efforts of states to manage their population growth. Forest and Ecology considers the state's ecological role, like managing forests and preserving the environment.

Additional Information:

The 15th Finance Commission used these criteria to ensure that the devolution of funds supports equitable development, addressing both financial and demographic needs of the states. The horizontal devolution approach ensures that resources are allocated to states based on the criteria rather than political considerations.

Q28. Arrange the following crisis in chronological order (starting from oldest).

- (a) OPEC Oil Crisis
- (b) International Debt Crisis
- (c) East Asian Financial Crisis
- (d) Argentinian Economic Crisis
- (e) Eurozone Crisis

Choose the correct answer from the options given below:

- (a) A, B, C, D, E
- (b) A, B, c, E, D
- (c) A, B, E, C, D
- (d) A, E, B, C, D

Ans.(a)

Sol. Correct Option: A [A, B, C, D, E]

Explanation:

The correct chronological order of the crises, from oldest to most recent, is as follows:

A. OPEC Oil Crisis – 1973 (The first oil shock triggered by an embargo by OPEC nations).

B. International Debt Crisis – 1982 (Began when Mexico defaulted on its sovereign debt, sparking a Latin American debt crisis).

C. East Asian Financial Crisis – 1997 (Started in Thailand with the collapse of the Thai baht and spread across East Asia).

D. Argentinian Economic Crisis – 2001 (Argentina's default on its public debt and severe economic depression).

E. Eurozone Crisis – 2009 (Began with the Greek debt crisis and spread to other Eurozone countries).

Information Booster:

OPEC Oil Crisis (1973): Led to a global energy crisis, high inflation, and economic stagnation ("stagflation").

International Debt Crisis (1982): Primarily affected Latin American countries, leading to a "lost decade" of growth.

East Asian Financial Crisis (1997): Caused massive currency devaluations, bank failures, and recessions in countries like Thailand, Indonesia, and South Korea.

Argentinian Economic Crisis (2001): Resulted in a sovereign default, bank freezes, and social unrest.

Eurozone Crisis (2009): Involved sovereign debt crises in Greece, Ireland, Portugal, Spain, and Cyprus, threatening the Euro currency union.

Additional Knowledge:

Option 2 (A, B, C, E, D) is incorrect because the Eurozone Crisis (2009) occurred after the Argentinian Crisis (2001).

Option 3 (A, B, E, C, D) is wrong as the Eurozone Crisis (2009) is placed before the East Asian Crisis (1997).

Option 4 (A, E, B, C, D) is entirely out of order.

Q29. The book entitled. "Why Nations Fail: The Origin of Power, Prosperity and Poverty" has been written by.

(a) Abhijit Banerjee

(b) Daron Acemoglu and James A. Robinson

(c) Amartya Sen

(d) Joseph Stiglitz

Ans.(b)

Sol. Correct Option: B. Daron Acemoglu and James A. Robinson

Explanation:

The book Why Nations Fail: The Origins of Power, Prosperity, and Poverty (2012) is a influential work in development economics and political economy, arguing that inclusive political and economic institutions are key to long-term prosperity, while extractive institutions lead to failure.

Information Booster:

1. Authors: Daron Acemoglu (MIT economist) and James A. Robinson (political scientist).

2. Central thesis: "Inclusive economic institutions" foster innovation and growth; "extractive institutions" hinder development.
3. Uses comparative case studies (e.g., North vs. South Korea, Nogales Arizona vs. Nogales Mexico).
4. Contrasts with theories based solely on geography, culture, or ignorance.

Additional Knowledge:

1. Option A (Abhijit Banerjee): Co-author of Good Economics for Hard Times and Poor Economics (with Esther Duflo).
2. Option C (Amartya Sen): Wrote Development as Freedom, The Idea of Justice.
3. Option D (Joseph Stiglitz): Wrote Globalization and Its Discontents, The Price of Inequality.

Q30. Arrange the following Chairman of Finance Commission in order of their appointment starting from the oldest.

- (a) A. M. Khurso
- (b) C. Rangaraj
- (c) N. K. P. Salve
- (d) K. Bramhananda Reddy
- (e) K. C. Pant

Choose the correct answer from the options given below:

- (a) A, C, E, D, B
- (b) C, E, A, D, B
- (c) B, D, E, C, A
- (d) D, C, E, A, B

Ans.(d)

Sol. Correct Option : 4 [D,C, E, A, B]

Information Booster:

- D. K. C. BrahmaNanda Reddy : Chairman of the 6th Finance Commission (1972)
 C N. K. P. Salve : Chairman of the 9th Finance Commission (1987)
 E. K. C. Pant : Chairman of the 10th Finance Commission (1995)
 A. A. M. Khusro : Chairman of the 11th Finance Commission (2000)
 B. C. Rangarajan : Chairman of the 12th Finance Commission (2002)

Additional Knowledge:

The Finance Commission is a constitutional body in India established under Article 280 of the Indian Constitution. Its primary function is to recommend the distribution of tax revenues between the Union and State governments and among the States themselves.

Here is a comprehensive list of all the Finance Commissions of India and their respective chairmen:

Finance Commission	Chairman	Operational Duration
First	K.C. Neogy	1952–57
Second	K. Santhanam	1957–62
Third	A.K. Chanda	1962–66
Fourth	P.V. Rajamannar	1966–69
Fifth	Mahavir Tyagi	1969–74
Sixth	K. Brahmananda Reddy	1974–79
Seventh	J.M. Shelat	1979–84

Finance Commission	Chairman	Operational Duration	
Eighth	Y.B. Chavan	1984-89	
Ninth	N.K.P. Salve	1989-95	
Tenth	K.C. Pant	1995-2000	
Eleventh	A.M. Khusro	2000-05	
Twelfth	C. Rangarajan	2005-10	
Thirteenth	Dr. Vijay L. Kelkar	2010-15	
Fourteenth	Y.V. Reddy	2015-20	
Fifteenth	N.K. Singh	2020-26	
Sixteenth	Arvind Panagariya	2026-31	

