P R E F A C E

"CUET PG ECONOMICS ", an invaluable resource designed to assist you in your journey towards achieving success in the highly competitive field of Economics. This book is a comprehensive compilation of (2022-2024) Past Year Questions (PYQ) and Practice Questions, each accompanied by a detailed explanation to help you enhance your knowledge and preparation for various competitive exams in the field of Economics.

PYQ and Practice Questions: Our comprehensive question bank covers all topics of CUET-PG Economics Syllabus topics, ensuring you have ample opportunities to practice and refine your skills.

Detailed Explanations: Each question in this book comes with a detailed explanation that not only answers the question but also provides you with the rationale behind the answer. This helps you understand the concepts thoroughly.

Coverage of All Topics: We've carefully selected questions from the syllabus CUET PG Economics, ensuring that you are well-prepared to tackle a wide range of questions that may appear in your examinations.

Exam-Oriented Approach: The questions in this book are curated to mimic the style and difficulty level of questions typically found in Economics competitive exams. This approach will help you become familiar with the format and structure of the actual exams.

Practice Makes Perfect: Regular practice is the key to success in any competitive exam. This book allows you to hone your problem-solving skills through an abundance of questions and detailed explanations.

Comprehensive Resource: Whether you're preparing for admission to postgraduate programs, research fellowships, or competitive recruitment exams, this book is a one-stop solution for your Economics preparation needs.

We understand the dedication, hard work, and determination it takes to excel in Economics, and we are committed to providing you with the best tools to help you reach your goals. We hope this book proves to be an invaluable asset in your preparation journey and leads you to the success you deserve.

We wish you the best of luck in your academic and professional endeavors.

A C K N O W L E D G E M E N T

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About Common University Entrance Test CUET PG

Common University Entrance Test (CUET) is being introduced for admission into PG programmes in Central and participating Universities for academic sessions. The Common University Entrance Test (CUET) will provide a common platform and equal opportunities to candidates across the country, especially those from North- East and from rural and other remote areas and help to establish better connections with the Universities. A single Examination will enable the Candidates to cover a wide outreach and be part of the admissions process to various Central Universities.

The CUET PG will be conducted in CBT mode in 02 shifts for admissions in the next academic Session.

Eligibility and Qualifications

Age Limit For appearing in the CUET (PG), there is no age limit for the candidates.

As the eligibility criteria for admission may be unique for every University, the candidates are advised to visit the University website to which they are applying for their respective programs. Candidates are advised to satisfy themselves before applying that they possess the eligibility

Marking Scheme

Each question carries 04 (four) marks.

For each correct response, the candidate will get 04 (four) marks.

For each incorrect response, 01 (one) mark will be deducted from the total score.

Un-answered/un-attempted response will be given no marks.

To answer a question, the candidate needs to choose one option as the correct option.

However, after the process of Challenges of the Answer Key, in case there are multiple correct options or change in key, only those candidates who have attempted it correctly as per the revised Final Answer Key will be awarded marks.

In case a Question is dropped due to some technical error, full marks shall be given to all the candidates irrespective of the fact who have attempted it or not. *Examination will be conducted on multiple days in two shifts per day schedule and date sheet will be available on the website. Keep viewing it for updates.

Syllabus

Note:

i. The Question Paper which will have 75 questions.

ii. All questions will be based on Subject-Specific Knowledge.

iii. All questions are compulsory.

iv. The Questions will be Bilingual (English/Hindi).

Economics (COQP10)

Micro Economics:

- Consumer Theory or Behavior. Demand, Utility, Indifference Curve, Revealed Preference Theory, Consumer Surplus
- Production Theory: Production Function, Law of Variable Proportions, Returns to Scale, Cost Function, types and concepts
- Price and Output determination in Market: Perfect and Imperfect Competition (Monopoly, Price Discrimination, Monopolistic, Duopoly and Oligopoly models) General Equilibrium, Efficiency and Welfare: Equilibrium and efficiency under pure exchange andproduction; overall efficiency and welfare economics, externality

Macro Economics:

- National Income Accounting
- Income and Output Determination: Aggregate Demand and Aggregate Supply, Effective Demand Principle, Classical and Keynesian Theory

Money and Inflation:

- Demand and Supply of Money, Money Multiplier and High-Powered Money, Credit Creation, Role of Reserve Bank of India and Commercial Banks, Quantitative Theories of Money, Philip's Curve
- Monetary and Fiscal Policy of India and its role.

Consumption and Investment Function:

- Permanent, Relative and Life Cycle Hypothesis, determinants of business fixed investment; residential investment and inventory investment, Multiplier and Accelerator
- Open Economy Models: Mundell and Fleming Model (IS, LM and BP curve), Balance of Payments, exchange rate determination, Purchasing Power Parity
- Economic Growth: Harrod-Domra Model, Solow Model

Statistical Methods in Economics:

- Mean, Mode, Median, Dispersion, Skewness, Quartile Deviation, Average Deviation, Standard Deviation
- Correlation
- Simple Regression Model Probability Distribution Sampling

Mathematical Methods in Economics:

- Sets and Vector
- Functions of one and several real variables Single and Multi-variable optimization
- Integration of functions
- Difference equations
- Determinants Matrix
- Linear Programming Probability
- Differential Equations

Indian Economy:

Overview of colonial economy:

- Macro Trends: National Income; population; occupational structure.
- Agriculture: Agrarian structure and land relations; agricultural markets and institutions - credit, commerce and technology; trends in performance and productivity; famines. Railways and Industry: Railways; the de-industrialization debate; evolution of entrepreneurial and industrial structure; nature of industrialization in the interwar period; constraints to industrial breakthrough; labor relations.
- Economy and State in the Imperial Context
- The imperial priorities and the Indian economy; drain of wealth; international trade, capital.
- Flows and the colonial economy - changes and continuities; government and fiscal policy.
- New Economic Policy:
- Public Economics: Public and Private Goods, Externalities, Budget, Deficits, Public Debt, Fiscal Federalism in India,
- Taxation: its economic effects; dead weight loss and distortion, efficiency and equity considerations, tax incidence, optimal taxation.
- International Trade Theories: Adam Smith, Ricardo, Heckscher-Ohlin model and New Trade Theories

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NUMBER OF QUESTIONS ASKED IN CUET-PG ECONOMICS (2022 to 2024)				
Micro Economics		**2022**	**2023**	**2024**
1.1	Consumer Theory	4	7	7
1.2	Production Theory	4	3	6
1.3	Price & Output Determination in Market	8	6	10

CHAPTER 1 MIRCRO ECONOMICS

Unit 1.1. Consumer Theory

[PREVIOUS YEAR EXAM QUESTIONS]

(CUET-PG-2022)

1. Bandwagon effect makes demand more____

(1) inelastic (2) elastic
(3) remains same (4) unitary elastic

(CUET-PG-2022)

2. If the demand for agricultural products is inelastic, then

(1) As the prices decrease, the revenues earned by producers increase
(2) As the prices decrease, the revenues earned by producers decrease
(3) The percentage decrease in prices is lower than the percentage increase in demand
(4) Rising prices do not lead to differentiation in producers income

(CUET-PG-2022)

3. A fall in the price of a commodity whose demand curve is a rectangular hyperbola causes total expenditures on the commodity to

(1) Increase
(2) Decrease
(3) Remain unchanged
(4) Increase with constant rate

(CUET-PG-2022)

4. The Engel curve for a Giffen good is

(1) Negatively sloped (2) Positively sloped
(3) Vertical (4) Horizontal

(CUET-PG-2023)

5. For the utility function u(x, y) = x y and given budget constraint $M = P_xX + P_yY$. what is the optimum bundle of consumption of x and y?

(1) $\left(\frac{M}{P_x}, \frac{M}{P_y}\right)$ (2) $\left(\frac{M}{2P_x}, \frac{M}{2P_y}\right)$
(3) $\left(\frac{M}{P_y}, \frac{M}{P_x}\right)$ (4) $\left(\frac{M}{2P_y}, \frac{M}{2P_x}\right)$

(CUET-PG-2023)

6. Match List-I with List-II:

List-II		List-II	
(A)	The shape of an indifference curve for two bads	(I)	Horizontal, parallel to X-axis, utility rises as move to a lower indifference curve
(B)	The shape of an indifference curve for one good and one bad	(II)	Concave to the origin
(C)	The shape of an indifference curve for one good Y and one neutral X	(III)	Upward sloping
(D)	The shape of an indifference curve for one bad Y and one neutral X	(IV)	Horizontal, parallel to X-axis, utility higher for a higher indifference curve

Choose the correct answer from the options given below:

(1) (A)-(II); (B)-(I); (C)-(IV): (D)-(III)
(2) (A)-(II); (B)-(III); (C)-(IV); (D)-(I)
(3) (A)-(III); (B)-(II); (C)-(I); (D)-(IV)
(4) (A)-(IV); (B)-(I); (C)-(III); (D)-(II)

(CUET-PG-2023)

7. Given below are two statements:

Statement-I: When the demand curve shifts if the supply curve is steeper, then the price change is larger and the change in the amount bought and sold is smaller, as compared to the flatter supply curve.

Statement-II: When the supply curve shifts: if the demand curve is steeper, then the price change is larger and the change in the amount bought and sold is smaller, as compared to the flatter demand curve.

In the light of the above statements, choose the correct answer from the options given below:

(1) Both Statement I and Statement II are true
(2) Both Statement I and Statement II are false
(3) Statement I is true but Statement II is false
(4) Statement I is false but Statement II is true

(CUET-PG-2023)

8. Given below are two statements:

Statement-I: Let (x_1, x_2) be the chosen bundle when prices are(p_1, p_2) and let (y_1, y_2) is some other bundle such that $p1X_1 + p2X_2 \geq p_1y_1 + p_2Y_2)$ Then if the consumer is choosing the most preferred bundle she can afford, we must have$(x_1, x_2) > (y_1, y_2)$.

Statement-II: If one bundle is chosen when another could have been chosen, we can say that the first bundle is revealed preferred to the second.

In the light of the above statements, choose the correct answer from the options given below:

(1) Both Statement I and Statement II are true
(2) Both Statement I and Statement II are false
(3) Statement I is true but Statement II is false
(4) Statement I is false but Statement II is true

(CUET-PG-2023)

9. Given below are two statements:

Statement-I: The price consumption curve is negatively sloped for a Giffen good.

Statement-II: All Giffen goods are inferior goods but all inferior goods are not Giffen goods.

In the light of the above statements, choose the correct answer from the options given below:

(1) Both Statement I and Statement II are true
(2) Both Statement I and Statement II are false
(3) Statement I is true but Statement II is false
(4) Statement I is false but Statement II is true

(CUET-PG-2023)

10. A consumer has a demand function for good X given by $D(P) = 100 - P$. Where P is the price of good X. If the price of good X is $Rs.50$, the value of consumer's surplus is

(1) ₹ 1,250 (2) ₹ 3,750
(3) ₹ 2,250 (4) ₹ 3,050

(CUET-PG-2023)

11. Match List-I with List-II:

List-I [Utility functions $U(x_1, x_2)$]	**List-II** $(MRS. x_1, x_2)$
(A) $C\ x_1^a\ x_2^b$	(I) $\frac{-(x_2+1)}{(x_1+2)}$
(B) $(x_1 + 2)(x_2 + 1)$	(II) $-\left(\frac{x_1}{x_2}\right)^{a-1}$
(C) $ax_1 + b\sqrt{x_2}$	(III) $-\frac{ax_2}{bx_1}$
(D) $(x_1^a\ x_2^b)^b$	(IV) $-\frac{2a\sqrt{x_2}}{b}$

Choose the correct answer from the options given below:

(1) (A)-(II); (B)-(III); (C)-(I); (D)-(IV)
(2) (A)-(III); (B)-(IV); (C)-(II); (D)-(I)
(3) (A)-(III); (B)-(I); (C)-(IV); (D)-(II)
(4) (A)-(I); (B)-(IV); (C)-(II); (D)-(III)

(CUET-PG-2024)

12. A trade off is

(1) A transaction at a price either above or below the equilibrium price
(2) Represented by a point outside a PPF
(3) Represented by a point inside a PPF
(4) A constraint that requires giving up one thing to get another

(CUET-PG-2024)

13. Keeping a consumer's income constant, if bundle X is chosen by a consumer when bundle Y is available, then when bundle Y is chosen, X must not be a feasible alternative. This property of consumer behaviour is known as

(1) The generalized axiom of consumer preference
(2) The weak axiom of revealed preference
(3) The feasibility property
(4) The strong axiom of revealed preference

(CUET-PG-2024)

14. Suppose an individual has a utility function given by, $U(x, y) = 2x + 3y$. We can say that this function displays

(1) Diminishing marginal rate of substitution
(2) Increasing marginal rate of substitution
(3) Constant marginal rate of substitution
(4) Zero marginal rate of substitution

(CUET-PG-2024)

15. For inferior goods, the subsitution effect of a price decrease and the income effect of the same price decrease

(1) Work in opposite direction
(2) Work in the same direction and decrease the aggregate consumption of the good
(3) Work in opposite direction and decrease aggregate consumption of the good.
(4) Work in the same direction

(CUET-PG-2024)

16. A utility maximizing consumer has a utility function given by $U(X, Y) = 2X + Y$. He has a budget constrant given by $X + 2Y = 10$. In equilibrium he purchases

(1) $X^* = 10, Y^* = 10$ (2) $X^* = 0, Y^* = 5$
(3) $X^* = 10, Y^* = 0$ (4) $X^* = 5, Y^* = 5$

(CUET-PG-2024)

17. Suppose a small country imposes an import tariff on a good. Which of the following statements is false?
(1) Consumer surplus from the goods will decrease
(2) Producer surplus from the goods will decrease
(3) Producer surplus from the goods will increase
(4) Decrease in quantity imported

(CUET-PG-2024)

18. Satish is very conscious of the food he eats. He eats only rotis and dal. A cup of dal costs Rs 2 while a roti costs one rupee and Satish decides to spend only Rs 13 per day on food. Also he decides to consume only 5500 calories a day. He has been told that each day
(1) He consumes 3 rotis and 5 cups of dal
(2) He consumes no more than 3 rotis per day
(3) He consumes 5 rotis and 5 cups of dal per day
(4) He consumes 5 cups of dal per day

Answer Key									
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
(2)	(2)	(3)	(1)	(2)	(2)	(1)	(1)	(1)	(1)
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**		
(3)	(4)	(2)	(3)	(1)	(3)	(2)	(1)		

[PRACTICE QUESTIONS]

1. Consider the pair of goods X and Y.
It is observed that when price of Y falls the demand for X rises. Which of the following options would you choose regarding the nature of these goods?
(1) They are complementary goods
(2) They are substitute goods
(3) They are giffen goods
(4) They are inferior goods

2. Choose the correct option regarding the following statements (i) and (ii).
(i) An increase in the income beyond certain limit leads to increase in consumption of necessary goods.
(ii) As per the law of demand, price and demand for commodity change in the same direction.
(1) Both the statements are correct
(2) Statement (i) is correct and statement (ii) is incorrect
(3) Both the statements are incorrect
(4) Statement (i) is incorrect and statement (ii) is correct

3. Other things remaining constant, if there is a successful advertisement campaign for a commodity, the demand curve for the same shall..... .
(1) Shift to the left
(2) Shift to the right
(3) Become positively stopping
(4) Become parallel to 'Y' axis

4. Why is the production possibility curve concave?
(1) There is a difference in the cost of production of the two goods
(2) There is a difference in the price pf the two goods
(3) There is a difference in the income of the two consumers
(4) Resources are not completely adaptable to alternative uses because of the specificity of the resources

5. In case of Giffen goods, the negative income effect is ..... the substitution effect.
(1) equal to (2) greater than
(3) lower than (4) the same as

6. The utility function of a consumer is given by $U=(q_1, q_2)=q_1 . q_2$, suppose the price of q_1 is Pq_1 =1 and price of q_2 is Pq_2=2. The consumer wants to spend amount of k units only what will be his demand for q_1 and q_2?
(1) $(q_1,q_2)=(k$,k/2) (2) $(q_1,q_2)=(k/4$,k/6)
(3) $(q_1,q_2)=(k/2, k/4)$ (4) $(q_1,q_2)=(k/2$,k/3)

7. If the demand and supply functions are given Pd=20−5x and Ps=4x+8; obtain Producer's surplus
(1) 31/9 (2) 32/9
(3) 129/9 (4) 29/9

8. The demand function for Good A is given by Q_A = 100 - 2 P_A + 0.2 Y + 0.3 P_B.
Find the cross - price elasticities of demand at P_A = 6, Y=500, P_B=10.
(1) 0.06 (2) 0.026
(3) 0.52 (4) - 0.06

9. In case of two goods for which the MRS is zero or infinite, then the nature of goods is:
(1) Perfect substitutes (2) Normal goods
(3) Perfect complements (4) Close substitutes

10. Which of the following is not true?

(1) Total effect of price change on consumption of a good is a combination of income effect and substitution effect

(2) For inferior goods, the income effect is always larger than the substitution effect, in absolute terms.

(3) For corner solution $MRSxy \neq PxPy$

(4) For a normal good both the income and substitution effect hold

11. Given the Demand function of a consumer D=10−2p, the consumer's surplus at price =2 is:

(1) 2 (2) 10

(3) 9 (4) 15

12. Engel Curve denotes

(1) various amounts of a good which a consumer would be willing to purchase at various price levels.

(2) various amounts of a good which a consumer would be willing to purchase at various income levels.

(3) various amounts of a good purchased when the price of its substitutes tend to rise.

(4) the relationship between income effect and substitution effect.

13. Given the demand function: Q=20P, where symbols have their usual meaning, at which price, the elasticity of demand would be unity?

(1) 20 (2) 10

(3) 5 (4) All of the above

14. The price elasticity of demand for a good with the demand function $q = kp^r$, (where p is price q is quantity demanded and k and r are positive constants) is:

(1) 1

(2) R

(3) Not constant as the function is non-linear

(4) $1/r$

15. Which of the following measures the degree of monopoly power? Here symbols have their usual meaning.

(1) $(AR-MR)/AR$ (2) $AR/(AR-MR)$

(3) $MR/(AR-MR)$ (4) $(AR-MR)/MR$

16. In the context of a straight line demand curve touching both the axes, which one of the following is correct? The demand is elastic:

(1) below the midpoint

(2) above the midpoint

(3) at the midpoint of the curve

(4) throughout the length of the demand curve

17. Giffen paradox occurs when income effect is:

(1) Greater than the substitution effect

(2) Equal to the substitution effect

(3) Less than the substitution effect

(4) Negative and is greater than the substitution effect

18. Match List-I (Consumer behaviour approach) with List-II (Economist with whom it is associated) and select the correct answer using the codes given below:

List-I	List -II
(a) Cardinal Approach	(i) Von Newman Morgenstein
(b) Indifference curve	(ii) Alfred Marshall
(c) Revealed Preference Approach	(iii) J. K. Hicks
(d) Neo-utility theory of risky choices	(iv) P. A. Samuelson

(1) (a)-(ii), (b)-(iii), (c)-(i), (d)-(iv)

(2) (a)-(iii), (b)-(ii), (c)-(i), (d)-(iv)

(3) (a)-(ii), (b)-(iii), (c)-(iv), (d)-(i)

(4) (a)-(iii), (b)-(ii), (c)-(iv), (d)-(i)

19. An individual's supply curve for labour will bend backwards when

(1) The substitution effect of wage rate increase is higher than income effect.

(2) The income effect of wage rate increase is negative and higher than the substitution effect.

(3) Leisure is a Giffen good.

(4) The substitution and income effect of wage rate increase reinforce each other.

20. Assertion (A): Consumer Surplus is the difference between the potential price and actual price.
Reason (R): There exists an inverse relationship between the price and consumer surplus.
Codes:

(1) Both (A) and (R) are true and (R) is the correct explanation of (A).

(2) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
(3) (A) is true, but (R) is false.
(4) (A) is false, but (R) is true.

Answer Key									
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
(1)	(2)	(2)	(4)	(2)	(3)	(2)	(2)	(3)	(2)
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
(3)	(2)	(4)	(2)	(1)	(2)	(4)	(3)	(2)	(1)

EXPLANATIONS

[PREVIOUS YEAR EXAM QUESTIONS]

1. Correct Answer is (2):- The bandwagon effect makes demand more **elastic** because people's buying decisions are influenced by the popularity of the product. When many people buy a product, others want to join in, increasing its demand. If the price drops, a lot more people buy it to be part of the trend, and if the price rises, people stop buying it quickly. This sensitivity to price changes makes the demand more elastic.

2. Correct Answer is (2): When demand is inelastic, the quantity demanded does not change significantly with a change in price. Therefore, a decrease in price will lead to a proportionately smaller increase in the quantity demanded, resulting in lower overall revenue for producers.

3. Correct Answer is (3): When the demand curve is a rectangular hyperbola, the price elasticity of demand is unitary (i.e., the absolute value of elasticity for demand is 1). This means that a change in price does not change the total expenditure on the commodity. Therefore, total expenditure on the commodity remains unchanged.

4. Correct Answer is (1): An Engel curve shows the relationship between income and the quantity demanded of a good. For a Giffen good, which is an inferior good with the peculiar property that its demand increases as its price increases, the relationship with income is also unusual. As income rises, the demand for the Giffen good falls because consumers can now buy more of normal goods with increased income and will buy less giffen good.

5. Correct Answer is (2): We will use Lagrange multipliers method :-

$L = xy + \lambda (M - P_x \times -P_y Y)$

Take partial derivatives & set them to zero

$\frac{\partial L}{\partial X} = y - \lambda P_x = 0 \Rightarrow y = \lambda P_x$ (1)

& $\frac{\partial L}{\partial y} = x - \lambda P_y = 0 \Rightarrow x = \lambda P_y$ (2)

$\frac{\partial L}{\partial \lambda} = M - P_x.X - P_y.Y = 0 \Rightarrow M = P_x.X + P_y.Y$ (3)

From (1) & (2), we get

$y = \lambda P_x \; and \; x = \lambda P_y$

Put them in (3), we get

$M = P_x(\lambda P_y) + P_y(\lambda P_x)$

$\Rightarrow \quad M = \lambda P_x P_y + \lambda P_x P_y$

$or \; M = 2\lambda P_x \cdot P_y$

$or \; \lambda = \frac{M}{2 P_x \cdot P_y}$

Substitute $\lambda \; in$ (1) and (2), we get

$y = \frac{M}{2 P_x \cdot P_y} \times P_x = \frac{M}{2 P_y}$

$x = \frac{M}{2 P_x \cdot P_y} \times P_y = \frac{M}{2 P_x}$

6. Correct Answer is (2):

(A) The shape of an indifference curve for two bads downward sloping and concave to the origin. **Concave to the Origin:** This shape reflects the diminishing marginal rate of substitution (MRS) between the two bads. As the quantity of one bad decreases, an individual is willing to accept a smaller decrease in the other bad to maintain the same level of disutility. In other words, the more of one bad you have, the less willing you are to accept more of the other bad to compensate

(B) The shape of an indifference curve for one good and one bad: For one good and one bad, the consumer prefers more of the good and less of the bad. This creates an indifference curve that is **upward sloping** as the consumer requires more of the good to compensate for more of the bad.

(C) The shape of an indifference curve for one good Y and one neutral X: For one good and one neutral good, the consumer's utility only depends on the quantity of the good. The indifference curve will be **horizontal, parallel to the X-axis**, as changes in the neutral good do not affect utility.

(D) The shape of an indifference curve for one bad Y and one neutral X: For one bad and one neutral good, the consumer's utility only depends on the quantity of the bad. The indifference curve will be **horizontal,**

parallel to the X-axis, as changes in the neutral good do not affect utility. However, since Y is a bad, the consumer prefers to have less of it, so utility is higher for a lower indifference curve.

7. Correct Answer is (1):

Statement I: True: When the supply curve is steep (inelastic), it means that the quantity supplied does not change much with price changes. Therefore, a shift in the demand curve (either increase or decrease) will lead to a significant change in price but only a small change in the quantity bought and sold.

Statement II:

True: When the demand curve is steep (inelastic), it means that the quantity demanded does not change much with price changes. Therefore, a shift in the supply curve (either increase or decrease) will lead to a significant change in price but only a small change in the quantity bought and sold.

Both statements are based on the principles of elasticity and how the steepness (inelasticity) or flatness (elasticity) of the supply and demand curves affect price and quantity changes in the market. When either curve is steeper (more inelastic), price changes tend to be larger, and quantity changes tend to be smaller.

Thus, Both Statement I and Statement II are true.

8. Correct Answer is (1):

Statement I is true with reason:

In consumer theory, if a consumer is choosing the most preferred bundle she/he can afford, then her choice reflects her preferences given her budget constraint. The statement correctly captures the idea that a rational consumer will always choose the most preferred bundle that she/he can afford.

Statement II is true with reason:

It aligns with the concept of revealed preference in consumer theory. This concept is based on the idea that the chosen bundle is at least as good as any other affordable bundle according to the consumer's preferences. Thus, the statement is a correct application of revealed preference theory.

9. Correct Answer is (1):

Statement I is true with reason:

A Giffen good is an inferior good for which an increase in its price leads to an increase in the quantity demanded, and a decrease in its price leads to a decrease in the quantity demanded. Given this unusual demand behavior, the price consumption curve for a Giffen good will be negatively sloped. As the price of the Giffen good increases, the consumer buys more of it (moving along the PCC), and as the price decreases, the consumer buys less of it.

Statement II is true with reason:

Giffen goods are a special category of inferior goods. They exhibit an increase in quantity demanded when their prices rise and a decrease in quantity demanded when their prices fall.

All Giffen goods are inferior goods because their demand increases as income decreases (the defining feature of an inferior good).

However, **not all inferior goods are Giffen goods** because most inferior goods still follow the normal law of demand: their quantity demanded decreases as the price increases, even though their demand increases when income decreases.

10. Correct Answer is (1): Consumer surplus is the difference between what consumers are willing to pay and what they actually pay. It can be calculated using the demand function and the actual price.

quantity demanded at P=₹50:

Q=D(50)=100−50=50

Next, find the maximum price consumers are willing to pay when the quantity demanded is zero. This is the price at which the demand function intersects the price axis (i.e., where Q=0):

0=100−P .

⇒P=100

Consumer surplus is the area of the triangle formed between the demand curve and the price line from P=50 to 100.

The formula for consumer surplus is:

Consumer Surplus=$\frac{1}{2}$×base×height

In this case, the base is the difference in price from 100 to 50 =50

The height is the quantity demanded at P=50

Height=50

Now, calculate the consumer surplus:

Consumer Surplus=$\frac{1}{2}$ ×50× 50=1250

11. Correct Answer is (3):

MRS = - (MUx1 / MUx2) or MRS= $-\frac{\partial U/\partial x1}{\partial U/\partial x2}$

(A) The Marginal rate of substitution (M.R.S) for utility function $u(x_1, x_2) = C\ x_1^a\ x_2^b$ is calculated as

∂U/∂x_1=a.$x_1^{a-1}x_2^b$ ∂U/∂x_2=b$x_1^a x_2^{b-1}$

M.R.S $(-)\frac{ax_2}{bx_1} \rightarrow option\ (III)$

(B) $U(x_1, x_2) = (x_1 + 2)(x_2 + 1)$

$\frac{\partial U}{\partial x_1} = x_2 + 1$ & $\frac{\partial U}{\partial x_2} = x_1 + 2$

$\Rightarrow M.R.S = -\frac{x_2 + 1}{x_1 + 2} \rightarrow option\ (I)$

(C) $U(x_1, x_2) = a.x_1 + b\sqrt{\ } x_2$:

$\frac{\partial U}{\partial x_1}$=a and $\frac{\partial U}{\partial x_2}$=$\frac{b}{2\sqrt{x_2}}$

M.R.S= - $\frac{\frac{\partial U}{\partial x_1}}{\frac{\partial U}{\partial x_2}}$

M.R.S is $(IV)\ -\frac{2a\sqrt{x_2}}{b}$

(D) $U(x_1\ x_2) = (x_1^a\ x_2^b\ )^{\ b}$

$\Rightarrow M.R.S = (-)(\frac{x_1}{x_2})^{\ a-1} \rightarrow option\ (IV)$

12. Correct Answer is (4): A constraint that requires giving up one thing to get another

A trade-off refers to a situation where choosing one option means sacrificing another. This concept is fundamental in economics, where resources are limited and decisions involve balancing different costs and benefits.

13. Correct Answer is (2): The property described in the question is a fundamental concept in consumer behaviour, particularly in the theory of revealed preference. It states that if a consumer chooses bundle X over bundle Y when both are available, then X is revealed to be preferred to Y. If X is chosen, Y must not be a feasible alternative, meaning the consumer would not choose Y when X is available.

This property aligns with:

2. The weak axiom of revealed preference

The Weak Axiom of Revealed Preference (WARP) asserts that if a bundle X is chosen over bundle Y when both are affordable, then Y should not be chosen over X if both are affordable in another situation.

14. Correct Answer is (3): Given the utility function U(x,y)=2x+3y, we can determine the marginal rate of substitution (MRS).

The marginal rate of substitution is defined as the rate at which a consumer is willing to substitute one good for another while keeping their utility constant. Mathematically, it is the ratio of the marginal utilities of the two goods:

MRS=$\frac{M.U_X}{M.Uy}$

The marginal utility of x (MU_x) is 2, and the marginal utility of y (MU_y) is 3. Therefore:

MRS=⅔.

Since the marginal rate of substitution (MRS) is constant and does not depend on the quantities of x and y, this utility function displays:

3. Constant marginal rate of substitution

15. Correct Answer is (1): For inferior goods, the substitution effect and the income effect of a price decrease indeed work in opposite directions.

- **Substitution Effect**: When the price of an inferior good decreases, the good becomes relatively cheaper compared to other goods. Consumers will tend to substitute away from the relatively more expensive goods towards the cheaper inferior good, increasing its consumption.
- **Income Effect**: For inferior goods, as income increases, consumption decreases. A price decrease for an inferior good effectively increases the consumer's real income (because they can buy the same amount for less money). As a result, consumers will buy less of the inferior good because they can now afford to buy better goods instead.

Therefore, the correct answer is:

1. Work in opposite direction

16. Correct Answer is (3): We have $U(x, y) = 2\ X + Y$ as utility function and

$X + 2y = 10$ Budget Constant

write the Lagrangian :-

$L = 2\ X + Y + \lambda\ (10 - X - 2y)$

$\frac{\partial L}{\partial X}$=$\frac{\partial (2\ X+Y+\lambda\ (10-X-2y)}{\partial X}$

Now $\frac{\partial L}{\partial X} = 2 - \lambda\ \ (1)$

Put $(1)\ = 0$

$\Rightarrow 2 - \lambda = 0$

$\lambda = 2$

Also $\frac{\partial L}{\partial X} = 1 - 2\lambda\ \ (2)$

Put $2 = 0$

$\Rightarrow 1 - 2\lambda = 0$

$\Rightarrow \lambda = \frac{1}{2}$

Now, $\lambda = 2$ & $\lambda = \frac{1}{2}$ contradicts, which means the derivative approach needs re-evaluation

Alternatively, analyze by trying the boundary conditions directly due to the nature of a linear utility function

preferring corner solutions :- For Y=0, X=10

$U\ (10, 0)\ =\ 2(10) + 0 = 20$

For $X = 0, Y = 5, U(0,5) = 2(0) + 5 = 5$
Thus, maximum utility is achieved at $X = 10$ & $Y = 0$
$X^* = 10, Y^* = 0$

17. Correct Answer is (2): When a small country imposes an import tariff on a good, the typical economic effects are:

1. **Consumer surplus from the goods will decrease: True**. Import tariffs raise the price of imported goods, which leads to higher prices for consumers, thereby reducing consumer surplus.
2. **Producer surplus from the goods will decrease: False.** Typically, producer surplus increases because domestic producers face less competition from foreign goods due to the tariff, allowing them to sell more at higher prices.
3. **Producer surplus from the goods will increase: True**. As noted, domestic producers benefit from reduced foreign competition and can increase their prices and sales.
4. **Decrease in quantity imported: True.** Import tariffs make imported goods more expensive, leading to a decrease in the quantity of goods imported.

Thus, the false statement is:

2. Producer surplus from the goods will decrease

18. Correct Answer is (1): Let's analyze Satish's food consumption problem based on the constraints provided:

1. **Cost Constraint**: Satish decides to spend only Rs 13 per day on food.
   - Let r be the number of rotis, and d be the number of cups of dal.
   - The cost equation is: r+2d=13
2. **Calorie Constraint**: Satish decides to consume only 5500 calories a day.

We can evaluate each option based on the cost constraint:

Option (1): He consumes 3 rotis and 5 cups of dal.

- Cost calculation: 3×1+5×2=3+10=13
- **This satisfies the cost constraint.**

Option (2): He consumes no more than 3 rotis per day.

- This statement does not provide enough information to determine the exact number of calories or the total cost. We cannot confirm the constraints based solely on this option.

Option (3): He consumes 5 rotis and 5 cups of dal per day.

- Cost calculation: 5×1+5×2=5+10=15
- This **exceeds the cost constraint of Rs 13 per day.**

Option (4): He consumes 5 cups of dal per day.

- This statement does not provide enough information to determine the exact number of rotis or the total cost. We cannot confirm the constraints based solely on this option.

Thus, (1) He consumes 3 rotis and 5 cups of dal.

[PRACTICE QUESTIONS]

1. Correct Answer is (1): Explanation:
When the price of good Y falls and the demand for good X rises, it indicates that the two goods are consumed together. This is characteristic of complementary goods, where a decrease in the price of one good leads to an increase in the demand for its complement.

2. Correct Answer is (2): Explanation:

- **Statement (i) is correct** because an increase in income typically leads to an increase in the consumption of necessary goods, though this effect diminishes as income continues to rise**.**
- **Statement (ii) is incorrect** because, according to the law of demand, price and demand for a commodity generally move in opposite directions: as price increases, demand typically decreases, and vice versa.

3. Correct Answer is (2): A successful advertisement campaign generally increases consumer awareness and interest in a commodity, leading to an increase in demand. This is represented by **a rightward shift** in the demand curve.

4. Correct Answer is (4): The production possibility curve (PPC) is concave because resources are not completely adaptable to alternative uses due to their specificity. This means that as more of one good is produced, increasingly larger amounts of the other good must be sacrificed, reflecting increasing opportunity costs. This leads to the concave shape of the PPC.

The Production Possibility Curve (PPC), also known as the Production Possibility Frontier (PPF), is a graphical representation that shows the maximum possible output combinations of two goods or services that an economy can produce, given its resources and technology.

5. **Correct Answer is (2):** In the case of Giffen goods, the negative income effect is greater than the substitution effect. This means that when the price of a Giffen good rises, the decrease in purchasing power (negative income effect) is so strong that it outweighs the substitution effect, leading to an increase in the quantity demanded of the good despite the price increase. This is an exception to the typical law of demand.

6. **Correct Answer is (3):** Solution: To find the consumer's demand for q_1 and $q_2$when they want to spend a total amount of k units, we can use the concept of utility maximization subject to the budget constraint.
The consumer's utility function is given by U = q_1 * q_2.
Let's assume the consumer spends x units on $q_1$and y units on q_2 , and the total amount spent is k units. Then we have the **budget constraint:**
Pq_1 * x + Pq_2 * y = k
1 * x + 2 * y = k
x + 2y = k
Now, we need to maximize the utility function U = q_1 * q_2 = x * y, subject to the budget constraint.
To solve for the consumer's demand, we can use the method of Lagrange multipliers:
L(x, y, λ) = x * y + λ * (k - x - 2y)
Taking the partial derivatives with respect to x, y, and λ, and setting them to zero:
∂L/∂x = y - λ = 0 (1) ∂L/∂y = x - 2λ = 0 (2)
∂L/∂λ = k - x - 2y = 0 (3)
From the first equation, **y = λ**. From the second equation, **x = 2λ**.
Now, substituting the values of x and y into the budget constraint:
2λ + 2(λ) = k
4λ = k
λ= k/4
So, y = λ = k/4, and x = 2λ = 2(k/4) = k/2.
Therefore, the consumer's demand for q1 and q2 is:
q1 = k/2 q_2 = k/4

7. **Correct Answer is (2):** The market equilibrium price occurs where demand equals supply, so we can set the demand and supply functions equal to each other and solve for x:
20-5x = 4x+8
9x = 12
x = 4/3
Substituting x = 4/3 into either the demand or supply function gives us the market equilibrium price:
P = 20-5(4/3) = 6.67
The producer's surplus is the area above the supply curve and below the market equilibrium price. To find this area, we first need to find the y-intercept of the supply curve, which is 8. Then, we can integrate the supply function from 0 to 4/3:
∫(8 to 6.67) (4x+8) dx = [($2x^2$ + 8x) from 0 to 4/3
= (2(16/9) + 8(4/3)) - (0 + 0)
= 32/9
Therefore, the producer's surplus is 32/9.

8. **Correct Answer is (2)**: The cross-price elasticity of demand is given by the formula:
Cross-price elasticity=($\partial Q_A/\partial P_B$)×($P_B/Q_A$)
Given the demand function:
QA=100−2P_A+0.2Y+0.3P_B
Substitute the values P_A= 6 ,P_B=10, Y=500:
$Q_A = 100 - 2(6)$+0.2(500)+0.3(10)=191
From the demand function, the coefficient of P_B is 0.3, so:
$\partial Q_A/\partial P_B$=0.3
Now, substitute the values into the cross-price elasticity formula:
Cross-price elasticity=0.3×(10/191)
Cross-price elasticity=0.3.(0.0524)=0.01572
This value does not directly match the options provided. However, it is closest to option **(2) 0.026** considering rounding or potential approximations in the options given.

9. **Correct Answer is (3):** When the marginal rate of substitution (MRS) is zero or infinite, it indicates that the goods are **perfect complements**. This means the goods are consumed together in fixed proportions, and substituting one good for the other does not increase the consumer's utility.

10. **Correct Answer is (2): Statement (2) is not true**. For inferior goods, the income effect and substitution effect work in opposite directions, but it is not necessarily true that the income effect is always larger than the substitution effect. In some cases, the substitution effect may dominate, leading to an overall increase in the quantity demanded when the price falls, even for an inferior good. An extreme case of an inferior good where the income effect outweighs the substitution effect is called a Giffen good, but this is a rare exception rather than the rule for all inferior goods.

11. Correct Answer is (3): Consumer surplus is the difference between what a consumer is willing to pay for a good and what they actually pay.

The demand function is given as: D=10−2p

We need to find the quantity demanded when the price p=2:

Q=10−2(2)=10−4=6

Consumer surplus is calculated as the area of the triangle formed under the demand curve above the price level. The formula for consumer surplus is:

Consumer Surplus=(½)×Base×Height

Base: The quantity demanded at the given price p=2, which is 6.

Height: The difference between the maximum price the consumer is willing to pay and the actual price.

To find the maximum price the consumer is willing to pay, set Q=0

0=10−2p⇒p=5

So, the height is:

5−2=3

Now, Consumer Surplus= (½)×6×3=18/2=**9**

12. Correct Answer is (2): The correct answer is:

(2) Various amounts of a good which a consumer would be willing to purchase at various income levels.

The Engel Curve represents the relationship between a consumer's income and the quantity of a good they are willing to purchase, showing how consumption of the good changes as income changes.

13. Correct Answer is (4): To find the price at which the elasticity of demand is unity (i.e., the price elasticity of demand equals 1), we need to calculate the price elasticity of demand and set it equal to 1.

Given the demand function: Q=20PQ = 20PQ=20P

The formula for the price elasticity of demand (E) is:

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

$\frac{dQ}{dP}=20$

$E=20\times\frac{P}{20P}=1$

This calculation shows that the elasticity of demand (E) is always 1, regardless of the price P.

So, the correct answer is:

(4) All of the above

14. Correct Answer is (2): **Explanation:**

Given the demand function: $q=k\cdot p^r$, where k and r are positive constants.

The price elasticity of demand (E) is given by: $E=\frac{dQ}{dP}\times\frac{P}{Q}$

Now, $\frac{dQ}{dP}=r.k.P^{r-1}$

Substitute $\frac{dQ}{dP}$ and $q=k\cdot p^r$ into the elasticity formula:

$E=(r.k.P^{r-1}).\frac{P}{K.P^r}=r$

15. Correct Answer is (1): Explanation:

The degree of monopoly power, often referred to as the Lerner Index, is a measure of a firm's market power. It is defined as:

$\text{Lerner Index}=\frac{P-MC}{P}$

where P is the price (which is equal to Average Revenue AR in this context), and MC is the Marginal Cost. However, since Marginal Revenue (MR) is related to MC in monopoly, the expression can also be written in terms of AR and MR.

The Lerner Index can be expressed as:

$\text{Lerner Index}=\frac{AR-MR}{AR}$

This formula indicates that the degree of monopoly power is the difference between Average Revenue (AR) and Marginal Revenue (MR) as a proportion of AR.

16. Correct Answer is (2): Explanation:

For a straight-line demand curve that touches both the price axis (y-axis) and the quantity axis (x-axis), the elasticity of demand varies along the curve:

- **Above the midpoint**: The demand is **elastic**. This is because, in this region, a percentage change in price results in a larger percentage change in quantity demanded.
- **At the midpoint**: The demand is **unitary elastic**. The percentage change in price is exactly matched by the percentage change in quantity demanded.
- **Below the midpoint**: The demand is **inelastic**. Here, a percentage change in price results in a smaller percentage change in quantity demanded.

Therefore, the demand is elastic above the midpoint of the demand curve.

17. Correct Answer is (4): Explanation:

The Giffen paradox refers to a situation where an increase in the price of a good leads to an increase in its quantity demanded, which is contrary to the law of demand. This paradox occurs specifically for Giffen goods, which are typically inferior goods with the following characteristics: