

CONSUMER BEHAVIOUR AND DEMAND

STUDY-NOTES

- **Utility:** It means realised satisfaction to a consumer when he is willing to spend money on a stock of commodity which has the capacity to satisfy his want.
- **Total Utility (TU):** It is the sum of all the utilities that a consumer derives from the consumption of a certain amount of a commodity.

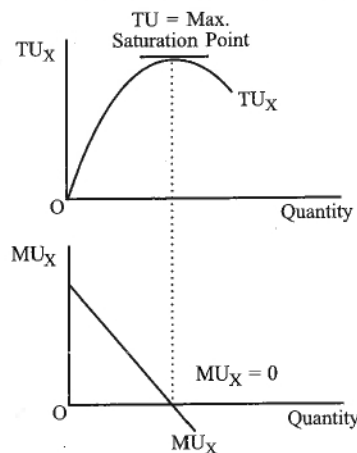
$$TU_n = MU_1 + MU_2 + \dots + MU_n$$

- **Marginal Utility (MU):** It is addition made to the total utility as consumption is increased by one more unit of the commodity.

$$MU_n = TU_n - TU_{n-1}$$

- **Relationship between TU and MU Curves**

- TU curve starts from the origin, increase at a decreasing rate; reaches a maximum and then starts falling.
- MU curve is the slope of the TU curve.
- When TU is maximum, MU is zero, it is called saturation point. (since slope of TU curve at that point is zero). Units of the good are consumed till the saturation point.
- As long as TU curve is concave, MU curve is downward sloping but remains above the x-axis.
- When TU curve is falling, MU curve becomes negative.
- The falling MU curve shows the law of diminishing marginal utility.



- **Law of Diminishing Marginal Utility:** The law states that as a consumer consumes more and more units of a commodity, marginal utility derived from each successive unit goes on diminishing. A stage comes when marginal utility becomes zero. At this point total utility becomes maximum. If the consumer consumes beyond this stage, marginal utility becomes negative and total utility falls.

- **Consumer's Equilibrium:**

Meaning: A consumer is said to be in equilibrium when he maximizes his satisfaction, given income and prices of the commodities.

- **Case I. One Commodity Case:** Let us suppose that a consumer has a given income with which he consumes only one commodity X. Since both his money income and commodity X have utility for him, he can either

spend his money income on commodity X or retain it with himself. If the consumer holds his income, the marginal utility of commodity (MUX) becomes greater than marginal utility of money income (MUM). In that case, total utility can be increased by exchanging money for good X.

Thus, a consumer is in equilibrium when he satisfies the following condition:

i.e., MU of the good = Price of the product or $MUX = PX$

- **Case II. Two Commodities Case–Law of Equi-Marginal Utility:** Let us now analyse a two commodity case. We assume that a consumer consumes only two commodities X and Y and their prices are PX and PY respectively. In such a case, the law of DMU is extended to two goods which the consumer buys with his income. The condition required by a consumer to maximise his utility for two commodities X and Y is given as:

$$MU_X = P_X \quad \dots(1)$$

$$MU_Y = P_Y \quad \dots(2)$$

Divide equation (1) by (2), we get:

$$\frac{MU_X}{P_Y}$$

- This is called the law of equi-marginal utility. The law states that a consumer will so allocate his expenditure so that the utility gained from the last rupee spent on each commodity is equal.
- **Consumer's Equilibrium with Indifference Curve Approach**
- **Indifference Curve:** An indifference curve shows different combinations of two goods that yield the same level of utility or satisfaction to the consumer. An indifference curve is downward sloping convex to the origin.
- **Properties or Features of Indifference Curve:** There are three features of indifference curves as regards their shape. These are:
 1. Downward Sloping to the Right.
 2. Convex to the Origin..
 3. Two Curves do not Intersect each other.
 4. A higher indifference curve represents a higher level of satisfaction
- **Budget Line or Income Line:** A budget line is a line which shows all possible combinations of two goods that a consumer can buy with his given income and prices of the commodities. The equation of a budget line is:

$$P_X.X + P_Y.Y = M$$

- **Conditions of Consumer Equilibrium under Indifference Curve Approach:** Two conditions that must be fulfilled by the consumer to be in equilibrium by indifference curve approach are:

$$MRS_{XY} = \frac{P_X}{P_Y} \quad \dots(1)$$

$$\text{Diminishing MRS} \quad \dots(2)$$

- The first equilibrium condition is necessary but it is not a sufficient condition.
- Diminishing MRS is the second equilibrium condition. It is known as stability conditions. It means, for a stable equilibrium, MRS must be continuously falling. This condition means that the indifference curve is strictly convex.

At equilibrium,

$$[\text{Slope of indifference curve}] = [\text{slope of budget line}]$$

$$\text{or } MRS_{XY} = \frac{P_X}{P_Y}$$

- **Quantity demanded** refers to the particular quantity which buyers are willing and able to buy on a given price during a given period of time.
- **Demand** for a commodity is defined as the quantity of that commodity which a consumer is willing and able to buy at a particular price during a particular period of time.

• **Factors affecting individual demand for a good**

There are following factors which affect demand for a commodity:

1. **Price of the Commodity:** There is inverse relationship between price of a commodity and demand for a commodity.
2. **Prices of Other Goods:** Demand for good x is influenced by the prices of other good. It is called cross price demand.
3. **Income of the Consumer:** Changes in money of the consumer changes the budget constraint facing the consumer, causing him to change his demand for goods. It is called income demand.
4. **Consumer's Tastes and Preferences:** Any change in consumer's tastes causes demand to change. If there is a change in tastes in favour of a good, then it will lead to increase in demand and any unfavourable change will lead to decrease in demand.
5. **Future Expectations of Buyers:** Future expectation is also one of the factors which causes change in demand. If it is expected by the consumer that the price of the commodity will rise in future, he will start buying more units of the commodity in the present, at the existing price and vice versa.

Law of Demand: There is a definite inverse relationship between the price of the good and the quantity demanded of that good if other things remain constant. Symbolically,

$$DX = f(PX), \text{ ceteris paribus}$$

where, DX = Quantity demanded of good X

PX = Price of the good X

Market Demand

An individual demand means quantity demanded of a good by an individual consumer at various prices per time period. Market Demand is the aggregate of the quantities demanded by all consumers in the market at different prices per time period.

The first five factors affecting individual and market demand are the same as mentioned earlier in the factors affecting Demand (Individual Demand)

6. **Number of Consumers in the Market.** More the consumers in the market, more will be the market demand for the commodities.
7. **Distribution of Income.** More even the distribution of income in a country, more will be the market demand for the commodity.
8. **Age and Sex Composition of Population.** The age group and sex composition of the consumers decide the pattern of market demand.

- **Price Elasticity of Demand:** Price elasticity of demand measures the responsiveness of demand of a good to a change in its price.

$$E_d = - \frac{\text{percentage change in quantity demanded}}{\text{percentage change in price}}$$

$$E_d = - \frac{\frac{\text{change in quantity demanded}}{\text{original quantity demanded}}}{\frac{\text{change in price}}{\text{original price}}} = - \frac{(Q_1 - Q) / Q}{(P_1 - P) / P} = - \frac{\frac{\Delta Q}{Q}}{\frac{\Delta P}{P}} = - \frac{\Delta Q}{\Delta P} \cdot \frac{P}{Q}$$

where,

ΔQ , = Change in quantity demanded (or $Q_1 - Q$)

Q = Original quantity demanded

ΔP = Change in price (or $P_1 - P$)

E_d = Coefficient of elasticity of demand, e_D is negative. The ratio is a negative number because price and quantity demanded are inversely related. In numerical sums, the minus sign is dropped from the numbers and all percentage changes are treated as positive.

• **Factors Affecting Price Elasticity of Demand:** The factors which determine the price elasticity of demand for a commodity or service are:

1. **Availability of Close Substitute.** A good having close substitutes will have an elastic demand and a good with no close substitutes will have an inelastic demand. Example: commodities such as pen, cold drink, car, etc. have close substitutes. When the price of these goods rise, the price of their substitutes remaining constant, there is proportionately greater fall in the quantity demanded of these goods. That is, their demand is elastic.
2. **Income of the Consumers.** If the income level of consumers is high, the elasticity of demand is less. It is because change in the price will not affect the quantity demanded by a greater proportion. But in low income groups, the elasticity of demand is high.
3. **Luxuries versus Necessities.** The price elasticity of demand is likely to be low for necessities and high for luxuries. A necessity is a good or service that the consumer must have such as food (bread, milk) and medicines. Luxuries are goods that are enjoyable but not essential.
4. **Proportion of Total Expenditure Spent on the Product.** Higher the cost of the good relative to total income of the consumer, more will be the price elasticity of demand. If the price of bread, ink, salt, match box, etc., which is relatively low, doubles it would have almost no effect on the quantity demanded of them. On the other hand, if price of car doubles then the quantity demanded will fall by a greater proportion showing high price elasticity of demand.
5. **Number of Uses of the Commodity.** The more the number of uses a commodity can be put to, the more elastic is the demand. If a commodity has few uses, it has an inelastic demand. Examples: goods like milk, eggs and electricity can be put to many different uses and hence, enjoy elastic demand, i.e., when prices are low, demand increases by a greater proportion as the goods can now be put to less important uses also.
6. **Time Period.** If the time period needed to find substitutes of the commodity is more, the price elasticity of demand is more and vice versa. Example: flying by aeroplane has inelastic demand as no substitutes are available in the short run.

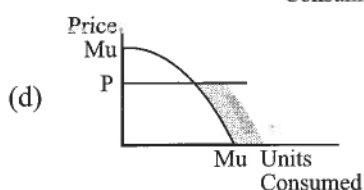
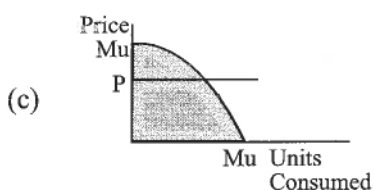
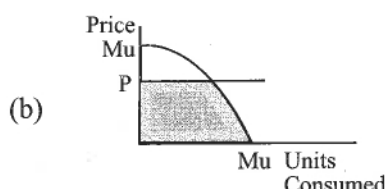
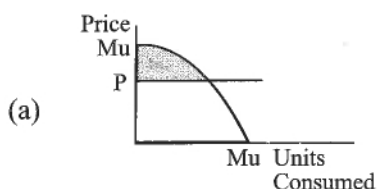
• **Degrees of Elasticity**

Coefficient Type of e_D	Type of e_D	Description	Type of Good	Shape of Demand Curve
1. $E_d = 0$	Perfectly inelastic demand	This occurs when to a percentage change in price there is no change in quantity demanded.	Essentials like life saving drugs	Vertical or Parallel to y-axis
2. $0 < E_d < 1$	Inelastic	This occurs when to a percentage change in price there is less than proportionate change in quantity demanded	Necessities like food, fuel	Steeper
3. $E_d = 1$	Unitary elastic demand	This occurs when to a percentage change in price there is equal change in quantity demanded.	Normal goods	Linear demand curve forms 45° angle with both the axes or a rectangular hyperbola.
4. $1 < E_d < \infty$	Elastic demand	This occurs when to a percentage change in price there is greater change in quantity demanded	Luxuries like eating in a 5-star hotel	Flatter
5. $E_d = \infty$	Perfectly elastic demand	This occurs when there is infinite change in quantity demanded without any change in price.	Imaginary situation (It exist under perfect competition)	Horizontal or Parallel to x-axis

QUESTION BANK

MULTIPLE CHOICE QUESTIONS

- Total utility is maximum when:
 - Marginal utility is zero.
 - Marginal utility is at its highest point.
 - Marginal utility is equal to average utility.
 - Average utility is maximum.
- Which of the shaded area in the diagrams below represent total utility?



- What does the area under the marginal utility curve depict?
 - Average Utility
 - Total Utility
 - Indifference Curve
 - Consumer Equilibrium
- Which one of the following is not an assumption of the theory of demand based on analysis of indifference curve?
 - Given scale of preferences as between different combinations of two goods.
 - Diminishing marginal rate of substitution.
 - Constant marginal utility of money.
 - Consumers would always prefer more of a particular piece of goods to less of it, other things remaining the same.
- The consumer is in equilibrium at a point where the budget line _____
 - Is above an indifference curve.
 - Is below an indifference curve.
 - Is tangent to an indifference curve.
 - Cuts an indifference curve.
- An indifference curve slopes down towards right since more of one commodity and less of another result in _____
 - Same satisfaction.
 - Greater satisfaction.
 - Maximum satisfaction.
 - Decreasing expenditure.
- The second glass of lemonade gives lesser satisfaction to a thirsty boy. This is a clear case of
 - Law of demand
 - Law of diminishing returns
 - Law of diminishing utility
 - Law of supply
- The consumer is in equilibrium when the following condition is satisfied:
 - $MU_x MU_y > P_x P_y$
 - $MU_x MU_y < P_x P_y$
 - $MU_x MU_y = P_x P_y$
 - None of these
- Which of the following options is a property of an indifference curve?
 - It is convex to the origin.
 - The marginal rate of substitution is constant as you move along an indifference curve.
 - Marginal utility is constant as you move along an indifference curve.
 - Total utility is the greatest where the 45 degrees line cuts the indifference curve.
- When economists speak of the utility of a certain good, they are referring to
 - The demand for the good.
 - The usefulness of the good in consumption.
 - The satisfaction gained from consuming the good.
 - The rate at which consumers are willing to exchange one unit of good for another one.

11. Budget set is
 (a) Right angled triangle formed by the budget line with the axes.
 (b) All points on the budget line.
 (c) Points inside the budget line.
 (d) Points on Y-axis from where budget line starts and the point on X-axis where line ends budget.
12. If indifference curves is straight line downward sloping, then
 (a) MRS is increasing (b) MRS is decreasing
 (c) MRS is constant (d) MRS is zero
13. If X and Y are two commodities, indifference curve shows
 (a) X and Y are equally preferred (b) Y is preferred to X
 (c) X is preferred to Y (d) None of these
14. If Marginal Rate of Substitution is constant throughout, the Indifference curve will be:
 (a) Parallel to the x-axis (b) Downward sloping concave
 (c) Downward sloping convex (d) Downward sloping straight line
15. If Marginal Rate of Substitution is increasing throughout, the Indifference curve will be:
 (a) Downward sloping convex (b) Downward sloping concave
 (c) Downward sloping straight line (d) Upward sloping convex
16. Which of the can be referred to as 'point of satiety'?
 (a) Marginal Utility is negative (b) Marginal utility is zero
 (c) Total Utility is rising (d) Total Utility is falling
17. Demand includes:
 (a) Ability (b) Desire (c) Willingness (d) All the above
18. Slope of demand curve is:
 (a) Positive (b) Negative (c) Both (d) None of these
19. In case of Normal goods, Demand curve shows:
 (a) a positive slope (b) A negative slope (c) Zero slope (d) None of these
20. Law of demand applies in case of
 (a) Inferior Goods (b) Normal Goods (c) Giffen Goods (d) None of these
21. Normal goods are those goods whose income effect is:
 (a) Positive (b) Negative (c) Zero (d) None
22. Which of the Following represents Substituted Goods:
 (a) Car & Petrol (b) Pen & Pencil (c) Bread & Butter (d) All of these
23. Which of the following is the example of complementary goods:
 (a) Bread & Butter (b) Pen & Pencil (c) Computer & laptop (d) T-shirt & Shirt
24. In case of Giffen goods, demand curve is:
 (a) Negatively Sloping (b) Positively Sloping (c) Zero sloping (d) None of above
25. How the Quantity demanded and price of the product related?
 (a) Directly (b) Inversely (c) Proportionately (d) None of these
26. With the increase in income of the consumer, the demand curve of the inferior good:
 (a) Shift to right (b) Shift to left (c) Becomes horizontal (d) Becomes Vertical
27. Demand curve is upward sloping in case of
 (a) Normal Goods (b) Inferior goods (c) Giffen Goods (d) None
28. Income Effect defines the relationship between
 (a) Price and demand (b) Price and income (c) Income and Demand (d) None of above

29. Movement along the demand curve occurs due to change in :
- (a) Price of the substituted goods (b) Price of the complementary goods
(c) Own price of the product (d) Factors other than price
30. When the specific quantity is purchased at particular price then it is called:
- (a) Demand (b) Quantity Demanded
(c) Shift in demand curve (d) Movement along demand curve
31. Shift in demand curve happens when:
- (a) There is change in Price of the product (b) There is change in factors other than price
(c) There is change in income (d) None of the above
32. A demand curve which takes the form of a horizontal line parallel to the quantity axis illustrates elasticity which is:
- (a) Zero (b) Infinite (c) >1 (d) <1
33. The elasticity of demand for a commodity will be higher-
- (a) The more of that commodity is considered a necessity.
(b) The more is buyer's demand loyalty.
(c) The more availability of substitutes.
(d) All of the above
34. If the quantity demanded of a commodity remains unchanged as its price changes, the coefficient of price elasticity of demand is-
- (a) Zero (b) Infinite (c) >1 (d) <1
35. If the percentage increase in the quantity of a commodity demanded is smaller than the percentage fall in its price, the coefficient of price elasticity of demand is-
- (a) Zero (b) $=1$ (c) >1 (d) <1
36. Elasticity of demand indicates-
- (a) Changes in quantity demanded (b) Rate of change in Quantity demanded
(c) Change in prices (d) Change in income
37. The price elasticity of demand explains the relationship between
- (a) Income and demand (b) Price and demand (c) Utility and demand (d) Price and utility
38. From the following commodities which has the lowest elasticity of demand
- (a) Car (b) Salt (c) Tea (d) House
39. Normally the shape of demand curve is:
- (a) Horizontal (b) Upward sloping (c) Downward sloping (d) Vertical
40. When the Elasticity is >1 then it is:
- (a) Elastic Demand (b) Inelastic Demand (c) Unitary Elastic Demand (d) None of the above
41. When the Percentage change in Quantity demanded is less than percentage change in price then price elasticity of demand is
- (a) Less than unity (b) More than unity (c) Equal to unity (d) None
42. When the Percentage change in Quantity demanded is equal to percentage change in price then price elasticity of demand is
- (a) More than unity (b) Equal to unity (c) Less than unity (d) None
43. When the percentage change in quantity is more than percentage change in price then the price elasticity of demand is:
- (a) More than unity (b) Less than unity (c) Equal to unity (d) None
44. The want satisfying power of a good is known as _____
- (a) Utility (b) Usefulness (c) Both (a) and (b) (d) None of these

45. Which of the following is/are the feature(s) of utility?
 (a) Subjective in nature (b) Depend upon urgency of wants
 (c) Both (a) and (b) (d) None of the above
46. Utility and usefulness are one and the same thing.
 (a) True (b) False (c) Partially true (d) Incomplete statement
47. Utility is most closely related to the term
 (a) usefulness (b) satisfaction (c) necessity (d) None of these
48. Same commodity can give different utility to different persons in the same situation.
 (a) True (b) False (c) Partially true (d) Incomplete statement
49. A commodity which is useful for a consumer must give utility.
 (a) True (b) False (c) Partially true (d) Incomplete statement
50. Cardinal utility approach was given by _____
 (a) Prof. Alfred Marshall (b) Prof. Hicks (c) Prof. Samuelson (d) Prof. Gossen
51. The unit of utility is known as _____
 (a) Marginal utility (b) MUM (c) Utils (d) None of these
52. Utility analysis is criticized for one of its assumption. According to this, utility can be expressed in terms of
 (a) cardinal number (b) ordinal number (c) Both (a) and (b) (d) None of these
53. Law of diminishing marginal utility was originally propounded by
 (a) Prof. Alfred Marshall (b) Prof. Hicks (c) Prof. Samuelson (d) Prof. Gossen
54. Law of diminishing marginal utility is also known as _____
 (a) Fundamental law of consumption (b) First psychological law of consumption
 (c) Both (a) and (b) (d) Neither (a) nor (b)
55. Law of DMU does not hold true in the absence of its assumptions.
 (a) True (b) False (c) Partially true (d) Incomplete statement
56. Which of the following is not an assumption of law of diminishing marginal utility?
 (a) Cardinal measurement of utility (b) No change in consumer's income
 (c) Different price for same commodity (d) All of the above
57. According to Law of DMU, total utility is the slope of marginal utility.
 (a) True (b) False (c) Partially true (d) Incomplete statement
58. When marginal utility is zero, total utility will be _____
 (a) maximum (b) maximum and constant
 (c) constant (d) minimum
59. When total utility increases at a diminishing rate, marginal utility will be?
 (a) increasing (b) diminishing (c) constant (d) diminishing but positive
60. Which of the following are the assumptions of Law of DMU?
 (i) Continuous consumption
 (ii) Standard units of consumption
 (iii) Price of good and income of consumer should remain constant
 (iv) Marginal utility of money should remain constant
 (v) Quality of goods should remain the same
 Choose from the options given below.
 (a) (i), (ii) and (iv) (b) (ii), (iii) and (iv)
 (c) (iii), (iv) and (v) (d) (i), (ii), (iii), (iv) and (v)
61. Law of DMU doesn't hold true under which of the following situations?
 (a) Money (b) Hobbies (c) Addictions (d) All of these

62. Marginal utility curve of a consumer is also consider as his
 (a) indifference curve (b) total utility curve (c) supply curve (d) demand curve
63. If a commodity is available for free, how many units consumer should consume to be in equilibrium using one-commodity case of cardinal utility approach?
 (a) 5 units (b) 10 units (c) Till MU becomes zero (d) Can't be determined
64. Law of equi-marginal utility was given by _____
 (a) Prof. Alfred Marshall (b) Prof. Gossen (c) Prof. Adam Smith (d) None of the above
65. Law of equi-marginal utility is also known as _____
 (a) Law of consumption (b) Second law of consumption
 (c) Law of usefulness (d) All of the above
66. Law of equi-marginal utility is a law of
 (a) production of wealth (b) consumption of wealth
 (c) distribution of wealth (d) exchange of wealth
67. The law of equi-marginal utility considers price of money as
 (a) zero (b) less than one (c) more than one (d) one
68. A consumer is in equilibrium, how will a consumer behave if $MU_x / P_x < MU_y / P_y$?
 (a) Consumer will consume more of good X and less of good Y
 (b) Consumer will consume more of good Y and less of good X
 (c) Consumer will consume more of both goods
 (d) Consumer will consume less of both goods
69. In two commodity equilibrium case, if MU_M is equal to 2, which of the following situation it indicates?
 (a) One util is equal to one unit of currency (b) One util is equal to two units of currency
 (c) Two utils are equal to one unit of currency (d) None of the above
70. Demand curve slopes downward due to law of
 (a) diminishing marginal utility (b) variable proportion
 (c) utility maximisation (d) None of the above
71. Ordinal utility approach was given by _____
 (a) Prof. Alfred Marshall (b) Prof. Hicks (c) Prof. Samuelson (d) Prof. Gossen
72. Which of the following is the vertical intercept of budget line?
 (a) M/P_x (b) M/P_y (c) P_x / P_y (d) None of these
73. Budget constraint is a narrower concept as compared to budget line.
 (a) True (b) False (c) Partially true (d) Incomplete statement
74. Given the budget line $2x + 5y = 100$, what will be its slope?
 (a) $-5/2$ (b) $5/2$ (c) $-2/5$ (d) $2/5$
75. Which of the following statements are true about consumer's equilibrium?
 (a) It is the situation of rest
 (b) There is only possible equilibrium at given point of time
 (c) Consumer's preferences continuously changes until it reaches equilibrium
 (d) All of the above
76. At the point of equilibrium, a consumer always reaches to the maximum point of total utility curve.
 (a) True (b) False (c) Partially true (d) Incomplete statement
77. As per cardinal utility approach, there are _____ situations of consumer's equilibrium.
 (a) Two (b) Three (c) Four (d) N-number

78. If a consumer is in equilibrium consuming one commodity, how will he respond to a fall in price of the commodity?
 (a) Decrease consumption of the commodity (b) Increase consumption of the commodity
 (c) Consumption will remain constant (d) None of the above
79. _____ shows various combinations of two products that give same amount of satisfaction.
 (a) ISO cost curve (b) Indifference curve (c) Marginal utility curve (d) ISO quant
80. An indifference curve is always drawn for _____ commodities.
 (a) One (b) Two (c) Three (d) N-number
81. As per ordinal approach, utility is _____ approach.
 (a) qualitative (b) quantitative (c) Both (a) and (b) (d) Neither (a) nor (b)
82. An ideal shape of indifference curve is always
 (a) Concave to the origin (b) Convex to the origin (c) L-shaped (d) A vertical straight line
83. The slope of indifference curve is called as _____.
 (a) Market rate of exchange (b) Marginal rate of transformation
 (c) Marginal rate of substitution (d) All of the above
84. Indifference curves between income and leisure for an individual are generally
 (a) Concave to the origin (b) Convex to the origin
 (c) Negatively sloped straight lines (d) Positively sloped straight lines
85. A consumer's total expenditure is restricted by
 (a) Budget constraint (b) Utility (c) Satisfaction (d) All of these
86. Indifference curve is convex to the origin due to
 (a) increasing marginal rate of substitution (b) diminishing marginal rate of substitution
 (c) increasing marginal rate of substitution (d) diminishing marginal rate of substitution
87. MRS_{YX} is equal to which of the following equation?
 (a) Change in X / Change in Y (b) Change in Y / Change in X
 (c) P_X/P_Y (d) None of the above
88. Which of the following are the properties of indifference curve?
 (i) Downward sloping (ii) Convex to the origin
 (iii) Higher IC represents higher satisfaction (iv) Two IC cannot intersect each other
 (v) IC cannot touch either axis (vi) IC need not to be parallel
- Choose from the options given below.
 (a) (i), (ii), (iii), (iv) and (vi) (b) (i), (ii), (iii), (iv) and (v)
 (c) (i), (iii), (iv) and (vi) (d) (i), (ii), (iii), (iv), (v) and (vi)
89. Intersection of two indifference curves gives same level of satisfaction.
 (a) True (b) False (c) Partially true (d) Incomplete statement
90. Indifference curves are convex to the origin because
 (a) Two goods are perfect substitutes (b) Two goods are perfect complementary goods
 (c) Two goods are imperfect substitutes (d) None of the above
91. Indifference curve for complementary goods will be
 (a) Convex to the origin (b) Concave to the origin (c) L-shaped (d) Straight line
92. How will a consumer behave if Marginal Rate of Substitution (MRS) > Marginal Rate of Exchange (MRE)?
 (a) Consume more of good X and less of good Y
 (b) Consume more of good Y and less of good X
 (c) Consume more of good X and same units of good Y
 (d) Consume more of good Y and same units of good X

93. An indifference curve which is drawn by taking economic bad commodity on both axis, will be
 (a) convex to the origin (b) concave to the origin (c) L-shaped (d) straight line
94. Budget line can change due to
 (a) change in income (b) change in price of either good X or good Y
 (c) change in price of both goods (d) All of the above
95. What will be the impact of change in income on the budget line?
 (a) Shifts to the right (b) Shifts to the left (c) Either (a) or (b) (d) Neither (a) nor (b)
96. What will be the impact of fall in price of good X on the slope of budget line?
 (a) Rise (b) Fall (c) Remain constant (d) Not defined
97. What will be the impact of rise in price of good Y on the budget line?
 (a) Rotate inward from vertical axis (b) Rotate outward from vertical axis
 (c) Rotate inward from horizontal axis (d) Rotate outward from horizontal axis
98. A set of indifference curve is known as
 (a) Indifference map (b) Indifference chart (c) Indifference curve (d) None of these
99. A consumer is in equilibrium, how will a consumer behave if $MRS_{XY} < P_X/P_Y$?
 (a) Consumer will consume more of good X and less of good Y
 (b) Consumer will consume more of good Y and less of good X
 (c) Consumer will consume more of both goods
 (d) Consumer will consume less of both goods
100. For a consumer, $MRS_{XY} = 4$ and $P_X = 40$ and $P_Y = 5$. Which statement suits this situation?
 (a) Consumer is in equilibrium
 (b) Consumer will consume more of good X and less of good Y
 (c) Consumer will consume more of good Y and less of good X
 (d) None of the above
101. Consumer's equilibrium refers to the state where a consumer reaches maximum point of total utility.
 (a) True (b) False (c) Partially true (d) Incomplete statement
102. Under monotonically preferred bundle, a consumer gets more units of at least one commodity with no less units of other commodity or more units of both commodities.
 (a) True (b) False (c) Partially true (d) Incomplete statement
103. A consumer is in equilibrium consuming two goods when
 (a) marginal utilities of different goods are equal (b) slope of MRS is equal to slope of budget line
 (c) Both (a) and (b) (d) None of (a) and (b)
104. At equilibrium, the slope of the indifference curve is
 (a) equal to the slope of budget line (b) greater than the slope of budget line
 (c) smaller than the slope of budget line (d) None of the above
105. At the point of equilibrium, the shape of indifference curve must be _____
 (a) concave (b) convex (c) straight line (d) Any of these
106. Write the correct sequence of options in column II by matching them with options of column I.
- | Column I | Column II |
|---|---|
| (a) Exceptions to law of diminishing marginal utility | (i) Music |
| (b) Prof. Gossen | (ii) Indifference curve analysis |
| (c) Prof. Allen and Hicks | (iii) Law of diminishing marginal utility |
| (a) (i) (ii) (iii) | (c) (iii) (ii) (i) |
| (b) (i) (iii) (ii) | (d) (ii) (iii) (i) |

INPUT TEXT BASED MCQs

Read the following passage and write answers of Q107–Q110

Ravi has fallen on hard times due to lockdown. His income per week is ₹400, spending ₹200 on food and ₹200 on all other goods. However, he is also receiving a social allowance in the form of ₹10 food stamps per week from government. The coupons can be exchanged for ₹10 worth of food, and he only has to pay ₹5 for such coupons.

107. What will be the equation of budget line food and non-food items (without food coupons)?
(a) Price (food) + Price (non-food) = 200 (b) Price (food) + Price (non-food) = 400
(c) Price (food) + Price (non-food) < 400 (d) Price (food) + Price (non-food) > 400
108. What will be the equation of budget line food and non-food items (with food coupons)?
(a) Price (food) + Price (non-food) = 210 (b) Price (food) + Price (non-food) = 410
(c) Price (food) + Price (non-food) < 410 (d) Price (food) + Price (non-food) = 405
109. Preferences are considered as monotonic when _____
(a) equal units of goods are more preferred (b) less units of goods are more preferred
(c) more units of the goods are more preferred (d) All of the above
110. If Ravi is to be at equilibrium point, what should be the condition?
(a) $MRS = 2$ (b) $MRS = 4$ (c) $MU_x / MU_y = 2$ (d) Can't be determined

Read the following passage and write answers of Q111–Q114

In economic terms, a consumer is an economic agent, who consumes a good or service for satisfaction of his/her wants. Keeping in mind the said definition, every individual consumer is a rational consumer and understands his/her best interest. However, on certain occasions, we can observe that people buy goods or services without their choice or needs, i.e. influenced by certain external factors/components. In such situations, utility is derived by mere purchase of goods and not from its consumption. Also, under such cases determining optimum level of consumption becomes difficult. One such example can be drawn from festive buying in India.

111. Rationality of a consumer depends upon which of the following factors?
(a) Consumer's taste and preferences (b) Utility from consumption of a good
(c) Based upon the habit of a consumer (d) All of the above
112. Which of the following statements is/are true for utility?
(a) Utility is the want satisfying power of a commodity
(b) Utility depends upon want and choice
(c) Same good may give different utility in different situations
(d) All of the above
113. In the above case, utility should be considered as _____ in nature.
(a) qualitative (b) quantitative (c) Both (a) and (b) (d) Neither (a) nor (b)
114. When a consumer buys goods without their need, consumer's equilibrium becomes _____.
(a) static/constant (b) dynamic (c) unambiguous (d) stable

Read the following passage and write answers of Q115–Q118

We buy many goods and services to satisfy our wants. Using up of goods and services to satisfy wants is called consumption and the economic agent who buys goods and services is called a consumer. When a consumer buys any good or service, his/her main objective is to get maximum satisfaction from the quantity of the commodities purchased by spending his/her income at the given market price. The way a consumer maximises his/her satisfaction from spending his/her income on various goods and services is the subject matter of consumer's behaviour.

115. Consumer's behaviour is the study of which of the following?
(a) Consumer's equilibrium (b) Demand (c) Both (a) and (b) (d) Neither (a) nor (b)
116. All goods that consumer consumes satisfy human wants.
(a) True (b) False (c) Partially true (d) Incomplete statement

117. As the income levels increases, the equilibrium condition _____
 (a) remains unchanged (b) changes (c) unstable (d) None of these
118. Which approach of utility gives more stable equilibrium condition?
 (a) Cardinal (b) Ordinal (c) Both (a) and (b) (d) Neither (a) nor (b)

Read the following passage and write answers of Q119–Q122

When consumers make choices about the quantity of goods and services to consume, it is presumed that their objective is to maximise total utility. In maximising total utility, the consumer faces a number of constraints, the most important of which are the consumer's income and the prices of the goods and services that the consumer wishes to consume. The consumer's effort to maximise total utility, subject to these constraints, is referred to as the consumer's problem. The solution to the consumer's problem, which entails decisions about how much the consumer will consume of a number of goods and services, is referred to as consumer equilibrium.

Consider the simple case of a consumer who cares about consuming only two goods: good 1 and good 2. This consumer knows the prices of goods 1 and 2 and has a fixed income or budget that can be used to purchase quantities of goods 1 and 2. The consumer will purchase quantities of goods 1 and 2 so as to completely exhaust the budget for such purchases. The actual quantities purchased of each good are determined by the condition for consumer equilibrium, which is $\text{Marginal utility of good 1} / \text{Price of good 1} = \text{Marginal utility of good 2} / \text{Price of good 2} = \text{Marginal utility of good N} / \text{Price of good N}$

119. The above equation of equilibrium given in the case study is based upon.....
 (a) first psychological law of consumption (b) second psychological law of consumption
 (c) Both (a) and (b) (d) Neither (a) nor (b)
120. The given law in case study is studied under which of the following approaches?
 (a) Cardinal utility (b) Ordinal utility (c) Both (a) and (b) (d) Neither (a) nor (b)
121. The consumer's effort to maximise total utility, subject to these constraints, is referred to as _____
 (a) utility analysis (b) consumer's problem (c) Both (a) and (b) (d) None of these
122. Consumer should consume combination of both goods in a such way that it
 (a) exhaust his entire income (b) save a part of his income
 (c) Either (a) or (b) (d) None of these

ANSWERS

Multiple Choice Questions

1. (a) 2. (c) 3. (b) 4. (c) 5. (c) 6. (a) 7. (c) 8. (a) 9. (a) 10. (c)
 11. (a) 12. (c) 13. (a) 14. (d) 15. (b) 16. (b) 17. (d) 18. (b) 19. (b) 20. (b)
 21. (a) 22. (b) 23. (a) 24. (b) 25. (b) 26. (a) 27. (c) 28. (c) 29. (c) 30. (b)
 31. (b) 32. (b) 33. (c) 34. (a) 35. (d) 36. (b) 37. (b) 38. (d) 39. (c) 40. (a)
 41. (a) 42. (b) 43. (a) 44. (a) 45. (c) 46. (b) 47. (b) 48. (a) 49. (a) 50. (a)
 51. (c) 52. (a) 53. (d) 54. (c) 55. (a) 56. (c) 57. (b) 58. (b) 59. (d) 60. (d)
 61. (d) 62. (d) 63. (c) 64. (b) 65. (b) 66. (b) 67. (d) 68. (b) 69. (c) 70. (a)
 71. (b) 72. (b) 73. (b) 74. (c) 75. (d) 76. (b) 77. (a) 78. (b) 79. (b) 80. (b)
 81. (a) 82. (b) 83. (c) 84. (d) 85. (a) 86. (b) 87. (a) 88. (d) 89. (c) 90. (c)
 91. (c) 92. (a) 93. (b) 94. (d) 95. (c) 96. (b) 97. (a) 98. (a) 99. (b) 100. (c)
 101. (c) 102. (a) 103. (c) 104. (a) 105. (b) 106. (b)

Input Text Based MCQs

107. (b) 108. (b) 109. (c) 110. (d) 111. (b) 112. (d) 113. (c) 114. (c) 115. (c) 116. (b)
 117. (b) 118. (c) 119. (b) 120. (a) 121. (b) 122. (a)

