Micro Economics
Consumer Behavior and Demand

Consumer behavior:
The study of how individual customers, groups, or organizations select, purchase, use, and dispose of ideas, goods, and services to meet their needs and requirements is known as consumer behavior. It refers to the consumer's actions in the market place and the motives for those actions.

Utility:
The ability of an asset to meet demand is its utility. The more the utility obtained from an item, the greater the need for it or the stronger the desire to have it. Utility is a straightforward concept. The same product can offer different levels of use to different people. The consumer's desire for the item is usually determined by the service (or satisfaction) he or she receives.

Types of Utility

1. **Cardinal Utility Analysis:** This analysis suggests that help can be stated numerically. It describes how the level of entertainment that follows the use of any goods or services can be organized according to the countless numbers.

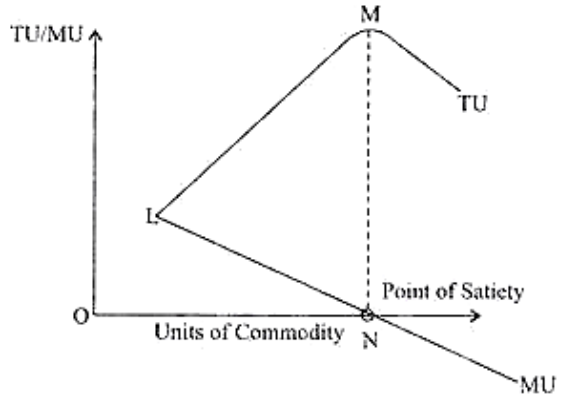
There may be two types, such as:

- **Total utility (TU):** The total satisfaction gained from the use of a particular asset over a given period of time is known as total consumption. To put it another way, it is a total of separate resources.
  TU = ∑MUORTU = MU1 + MU2 + MU3 + ... + MUNTU = ∑MUORTU = MU1 + MU2 + MU3 + ... + MUn
- **Marginal Utility (MU):** A separate service is a change in every service caused by the use of an additional unit of equipment. To put it another way, it is the amount earned for each additional unit.
  MUn = TUn − TUn − 1MUn = TUn − TUn − 1

2. **Ordinal Utility Analysis:** Defines a level of satisfaction that follows the use of any goods or services that cannot be measured. These items, on the other hand, can be arranged in chronological order. Consumption of a product is determined by its level of satisfaction. It is realistic and sensible. Ignorance curve is part of the ordinal usage analysis.

Relationship between TU and MU:

- As long as the MU approves, the TU rises in proportion to the increase in asset consumption.
- TU increases / increases at a lower rate when the MU of each subsequent unit begins to decline.
- MU becomes zero when TU reaches its maximum value. TU stops growing at this point, which is referred to as a safe haven. (Point to c, where MU = 0, then point to where TU is limited)
- When consumption exceeds the satisfaction point, the MU becomes negative and the TU begins to decline. (Situation after point c and a in the diagram).



Law of Dimensional Marginal Utility:
In terms of marginal use limitations, as the consumer uses additional units of goods, the minimum profit per unit subsequent decreases.
The requirement law is based on this principle, as the concept of price reduction is related to the Unusual Reduction of Services Act.
Consumers are willing to spend less money to get more product as their consumption decreases with increased consumption.

Assumption of this law:

- Only standard units are used for property.
- Regular use of the property is possible.

Table

Units	TU	MU
1	10	10
2	19	9
3	25	6
4	28	3
5	28	0
6	27	-1

At the table we see that,

- TU continues to grow at a declining rate and MU is declining.
- If the TU is high, that is 28 in the 5th unit, the MU becomes 0.
- After this point, the MU becomes negative, as the TU begins to collapse.
- TU will only rise to the point where the MU is positive, when Mu turns negative, TU begins to decline.

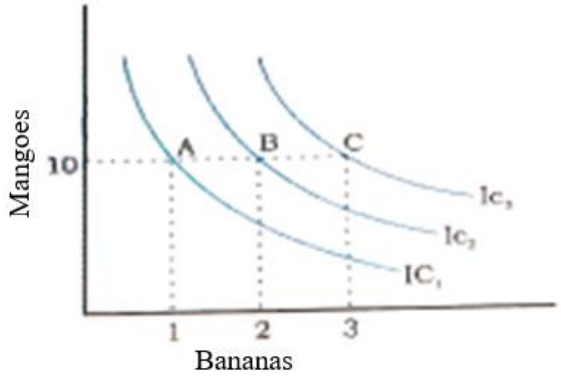
Indifference Curve:

- Indifference curve is an image that shows all product combinations that provide the same level of satisfaction to the consumer.
- Since all combinations offer the same level of satisfaction, the consumer loves them all equally. As a result, the negligence curve got its name.
- A simple two-dimensional graph is used for the general negligence curve analysis.
- Each axis represents a different type of economic advantage. The customer who adheres to the negligence curve is not interested in any of the product combinations shown in the curve as all product combinations in the negligible curve bring the same level of use to the consumer.

Table

Combination	Good Y Bananas	Good X Mangoes
A	1	10
B	2	10
C	3	10

Diagram

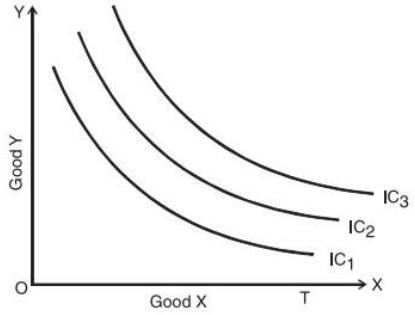


Explanation
In the diagram we can see that IC3 is a high degree of negligence, as here, there are 10 units of Good Z, and 3 units of Good Y. So point C indicates a high level of satisfaction.

IC Slope: Marginal Rate of Substitution (MRS):
The extent to which a consumer exchanges one for a good alternative to another as long as that latter provides equal satisfaction is known for a low exchange rate.
The marginal level of change is the slope of the negligence curve. Because MRS is shrinking, the curve of negligence is naturally convex. Like the increase in the price of a single good, the buyer gradually loses its value.
MRS = Loss of Good Y/Gain of Good X or $-\triangle Y/\triangle X$

Characteristics of Indifference Curve:
- **Downward slope:** Indifference curves have a downward slope i.e., slopes downward from left to right.
- **Diminishing MRS:** To the point of origin, indifference curves are convex. It's because the marginal rate of substitution is decreasing.
- **IC's never intersect:** The curves of indifference never meet or intersect. Two points on two different ICs can't possibly provide the same level of satisfaction.
- **Higher Indifference curve:** A higher level of satisfaction is represented by a higher indifference curve.
- **IC never touches x-axis or y-axis:** An indifference curve never touches any of the axis because if it touches any one axis, that would mean the consumption of other good is zero. And, this is not possible, as IC focus on the consumption of two goods.

Indifference Map:
The Indifference Curves collection includes the Indifference Map. Provides complete picture of consumer preferences.
The diagram below shows a negligent map made of three curves:



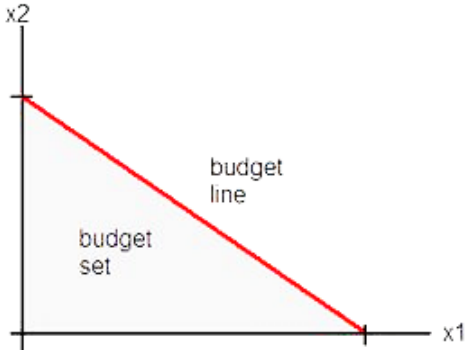
Indifference Map

Consumer budget
- Budget limit refers to the range of goods and services that a consumer can purchase based on current prices and revenue.
- The term "consumer budget" refers to the consumer's real money or purchasing power, which he can use to buy bundles of two items at a fixed price. It means that the buyer can only buy goods in bulk (bulk) that cost less or equal to his salary.

Budget Set:
- A budget set is a collection of the amount a consumer can buy with his current income at current market prices.
- A consumer budget set is a set of all the bundles a consumer can buy with his or her income at current market prices.
- A consumer budget set is actually a set of all the bundles of goods and services that a consumer can buy with the money available.

- ⇒p1x1 + p2x2≤M ⇒p1x1 + p2x2≤M

Budget Line:
The budget line is a graphical representation of all bundles that cost the same as a consumer's income. The budget line shows two different combinations of goods that a consumer can buy based on his or her income and commodity prices.
PXQX + PYQY = SPXQX + PYQY = S
Here,
PXPX = Asset Price X
QXQX = Asset X
PYPY = Asset value Y
QYQY = Asset value Y
S = Consumer Revenue



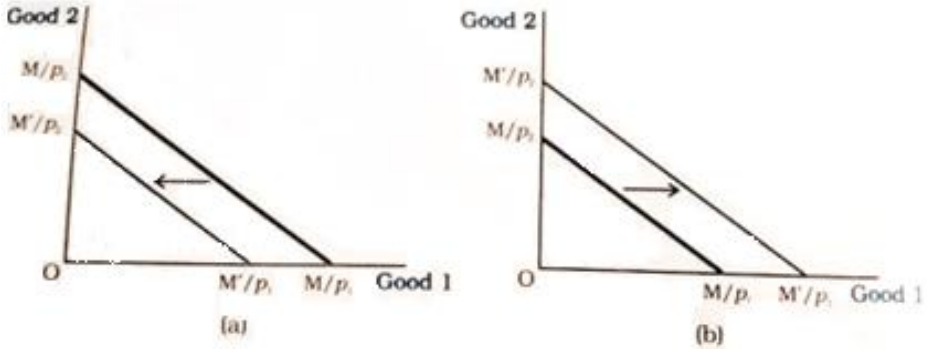
Attainable and non-attainable combinations
Any point within the local budget line is an affordable combination that a consumer can buy based on his or her income and asset value. Any point outside the area is an unattainable combination; the buyer will not be able to afford it.

Budget constraint:
The budget limit covers all the different combinations of goods or products one can afford based on the cost of goods and income of the consumer.
For example:
Q1 is the quantity of Good 1,
Q2 is the quantity of Good 2,
P1 is the price of Good 1,
P2 is the price of Good 2.
P1q1 = Total amount spent on Good 1.
P2q2 = Total amount spent on Good 2.

As a result, the number of the budget line will be p1q1 + p2q2 = X. The budget line is always sloping, so consumers can only increase their positive consumption 1 by reducing their positive consumption 2.
If customers want to purchase one more unit of Item 1, they can do so only if they are willing to offer a certain amount of something good. Consumers have a limited budget. They have to decide if they will spend money on Good 1 or Good 2.

Changes or shifts in the Budget Line:
- Due to changes in consumer income and asset prices, there may be associated fluctuations such as left or right moving.
- Increasing consumer income shifts the budget line to the right, on the contrary.
- There will be fluctuations in the budget line if the price of one good item changes. When prices fall, purchasing power rises, causing external circulation, and vice versa.
- In Figure A, when the consumer's salary rises, the budget line changes from BB 'to CC', as the consumer is now able to pay more for both goods, keeping the price unchanged.

- In the image of B, when consumer salary increases, the budget line changes from CC 'to BB', as the buyer is now able to buy both goods, keep the price unchangeable.



Derivation of the Slope of the Budget Line:

The volume of the budget line indicates how much positive change 2 is required for each positive change unit 1 in the budget line.

Now let's calculate the slope of the budget line as follows:

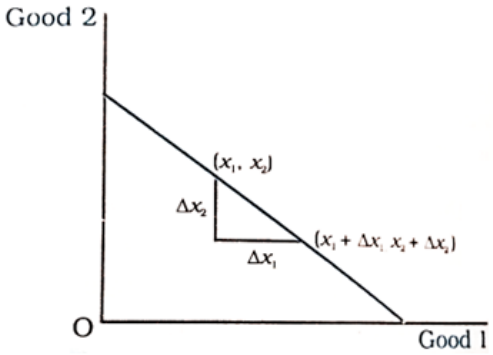
On the budget line, take two points.

Say, (x1, x2) and (x1+△x1, x2+△x2) (x1, x2) and (x1+△x1, x2+△x2)

p1x1+p2x2=M.....(1)p1(x1+△x1) + p2(x2+△x2) = M.....(2)p1 x 1 + p2x2 = M.....(1)p1(x1+△x1)+p2(x2+△x2)=M.....(2)

Subtracting (1) from (2), we get

p1△x1+p2△x2=0△x2△x1=−p1p2p1△x1+p2△x2=0△x2△x1=−p1p2



Changes in the Budget Set:

- Available quantities are determined by the value of the two goods and the income of the customer.
- The set of available quantities may change as the price of goods or customer income changes.

Assume that customer revenue raises from N to N ′ while two (2) asset prices have not changed.

Customer will be able to purchase all batches with their new currency (x1, x2) (x1, x2) such as p1x1 + p2x2≤N′p1x1 + p2x2≤N ′

The current budget line figure is:

p1x1 + p2x2 = N′p1x1 + p2x2 = N ′

The above figures can also be written as x2 = N1p2 − p1p2x1x2 = N1p2 − p1p2x1

It is noteworthy that the trend of the new budget line is the same as it was before the client's income changed.

Consumer’s optimum Choices:

- The Indifference Curve and the Budget Line can be used to describe the buyer's good choice of two assets.
- Satisfaction curve represents the negligence curve, while the budget line represents the budget line.
- Considering the budget limit, a consumer may want to get more for two goods. As a result, he will strive to get the highest IC possible while living within his means.
- Consumer equality is possible if:

- IC is straight until it reaches the equilibrium position.
- IC Slope = Slope Line Budget

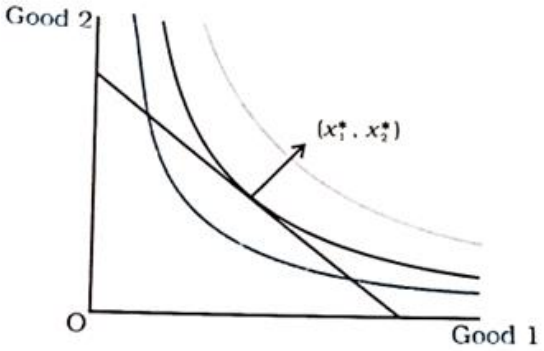


Figure illustrates the consumer's optimum. At (x^*_1, x^*_2) the budget line is tangent to the black coloured indifference curve. The first thing to note is that the indifference curve just touching the budget line is the highest possible indifference curve given the consumer's budget set. Bundles on the indifference curves above this, like the grey one, are not affordable. Points on the indifference curves below this, like the blue one, are certainly inferior to the points on the indifference curve, just touching the budget line. Any other point on the budget line lies on a lower indifference curve and hence, is inferior to (x^*_1, x^*_2), therefore (x^*_1, x^*_2) is the consumer's optimum bundle.

Demand: The quantity that a consumer is able and willing to purchase at a specific price and within a specific time frame.

Demand Function:
The demand function represents the operational relationship that occurs between the value of the asset required and its various decisions.
Dx = f (Px, PR, Y, T, E)
Here,
Dx = Quantity Requirement
f = Working Relationships
Px = His Price of Goods
PR = Related price of good
Y = Income
T = Tastes and Favorites
E = Expected

Factor affecting demand:
- **Product Price:** The price of a commodity has a negative (negative) relationship to the value of the goods that consumers are willing and able to buy. Consumers prefer to buy more goods with a lower price and a lower price for the goods being sold. The inconsistent relationship between price and the amount of money people are willing and able to spend is known as the Needs Act.
- **Consumer's income:** The impact of the price on a product rating that consumers are willing and willing to buy depends on the quality of the product we are discussing.

1. **Normal Goods:** In many products, there is a positive (direct) relationship between the consumer's income and the degree of good behavior that a person is willing to buy. At the end of the day, in these commodities where income rises the interest on the product will increase; if revenue falls, product interest will decrease. These are called common goods.
2. **Inferior Goods:** However, in some assets, the change in income has a different effect. The bottom line is that the one whose need is reduced as wealth grows. In other words, consumer demand for low-cost items is linked to revenue. In economics, inferior suggests that there is a mismatch between a person's income and the interest or demand of that asset.

In addition, whether good or bad is a matter of personal preference. For you, the property may be generally good, but for someone else, it may be less.

- **Related Asset Price:** Assuming that the price of the asset remains constant, there are two categories of connected products that affect the demand for the asset.

1. **Complementary goods:** Compatible goods are connected products that are used together because their use decreases when used alone. As a result, when the demand for one of the two products increases, the demand for the other increases, although the price of the commodity remains unchanged, and vice versa.
2. **Substitute goods:** Conventional assets are equally competitive assets. As a result, if the demand for one of the two products increases, the demand for another product decreases even though the price of the product remains constant, and vice versa.

- **Customer tastes and preferences:** A positive change in consumer preferences and preferences leads to increased demand, while the opposite occurs when there is a negative change in consumer preferences and preferences.
- **Expectations:** If the consumer expects the future supply to decline, his or her current demand for that quality will increase, and vice versa, keeping the price stable.

Derivation of Demand Curve:

Consider individual consuming bananas (X1) and mangoes (X2), whose income is M and market prices of X1 and X2 are P'1 and P '2 respectively. Figure (a) depicts her consumption equilibrium at point C, where she buys X '1 and X '2 quantities of bananas and mangoes respectively. In panel (b) of figure 2.14, we plot P '1 against X '1 which is the first point on the demand curve for X1

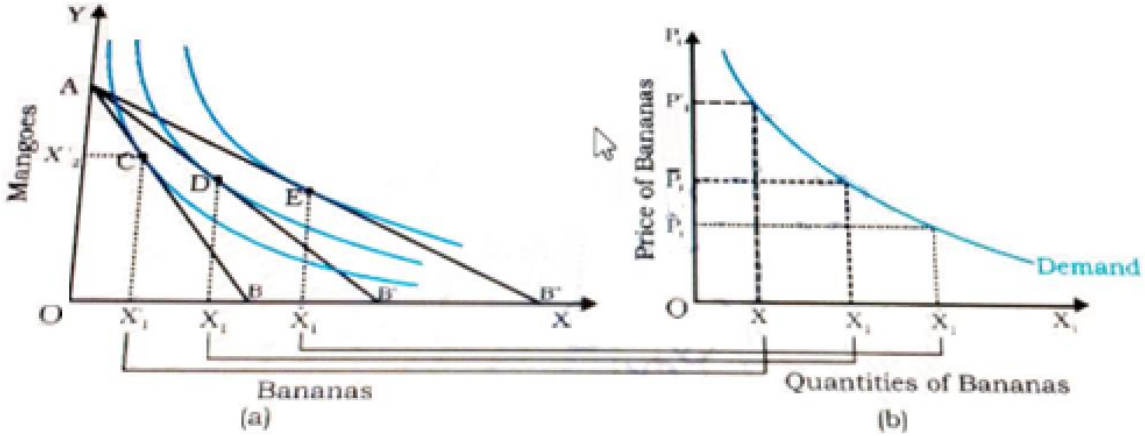


Fig. 2.4 Deriving a demand curve from indifference curves and budget constraints

Suppose the price of X1 drops to P1 with P '2 and M remaining constant. The budget set in panel (a), expands and new consumption equilibrium is on a higher indifference curve at point D, where she buys more of bananas (X X ' 1 1 >). Thus, demand for bananas increases as its price drops. We plot P1 against X1 in panel (b) of figure 2.14 to get the second point on the demand curve for X1. Likewise the price of bananas can be dropped further to ∧ P1, resulting in further increase in consumption of bananas to ∧ X1. ∧ P1 plotted against ∧ X1 gives us the third point on the demand curve. Therefore, we observe that a drop in price of bananas results in an increase in quality of bananas purchased by an individual who maximizes his utility. The demand curve for bananas is thus negatively sloped.

The negative slope of the demand curve can also be explained in terms of the two effects namely, substitution effect and income effect that come into play when price of a commodity changes. When bananas become cheaper, the consumer maximizes his utility by substituting bananas for mangoes in order to derive the same level of satisfaction of a price change, resulting in an increase in demand for bananas.

Moreover, as price of bananas drops, consumer's purchasing power increases, which further increases, demand for bananas (and mangoes). This is the income effect of a price change, resulting in further increase in demand for bananas.

The Law of Demand
The effects of a change in the price of an item are defined in the form of a law known as the law of demand.
It says that when the price of a commodity decreases, the commodity price rises, and when the commodity price rises, the desired value decreases. In other words, if everything else remains the same, the price of the asset and its requested price have a negative relationship.

Exceptions to the law of demand
In some cases, when the price goes up, the price wants to go up again (vice versa). The exceptions are:

1. **Distinction Articles:** Where the good considered is one of the positions. As the price increases, so should the price requested to maintain the prestige value. For example, antique pieces, gems etc. Also, the demand for these goods is due to their high prices.
2. **Assets Required:** When good is a basic need, demand increases even if the price goes up as good is a necessity.
3. **Giffen Good:** Where good is considered is good Giffen.

Types of Goods

- **Normal Goods:** Normal goods are those that need to increase due to the increase in the income or income of the consumer.
- **Inferior Goods:** Inferior goods are those whose demand is declining as consumer income increases. As a result, as consumer reach increases, so does the demand for low-quality goods.
- **Giffen Goods:** It is a low-cost, non-luxury item that conflicts with common economic ideas and consumer needs. As prices rise, demand for Giffen items increases, and as prices fall, demand for Giffen goods decreases.
- **Substitutes Goods:** These are the same assets that can be used interchangeably. For example, tea and coffee are substitutes.
- **Complementary Goods:** These are items that are commonly used together and related. For example car and petrol.

Shift in demand curve:

- The change in the demand curve reflects the changes required for each possible price as a result of changes in one or more non-priced items such as comparable item price, revenue, taste and preferences, and consumer expectations.
- The rating point changes whenever the demand curves changes.
- The search curve shifts to one of two directions: switch to the right or shift left.
- Price does not change factors other than price cause a change in demand.

Movements along the Demand Curve:

- The demand curve movement indicates the difference in both the price and the required amount from one place to another.
- If a price demands changes due to a change in the price of a product or service, the demand curve goes away.
- Movement near a curve is possible on either side: upward or downward movement.

Differences - Movements in the Demand Curve and Shifts in the Demand Curve:
The following points are noteworthy in terms of the distinction between movement and shift in the demand curve:

Basis	**Movement along the Demand Curve**	**Shift in Demand Curve**
Meaning	Movement in the demand curve occurs when a commodity experiences a change in both quantity demanded and price, leading the curve to move	Shift in demand curve occurs when the price of a commodity remains unchanged however the quantity demanded changes due to other factors, allowing the curve to shift to one

	in a specific direction.	side.
Caused by	Movement along a demand curve occurs when changes in quantity sought are connected with variations in commodity price.	A shift in the demand curve is caused by changes in non-price factors, such as income, taste, expectation, population, price of comparable commodities, and so on.
Indicated by	Changes in the quantity demanded are indicated by movement along the demand curve.	A shift in the demand curve reflects a shift in the commodity's demand.
Includes	Upward and Downward movement	Rightward and Leftward shift

Diagrammatic Representation of Movements along the Demand Curve and Shifts on the Demand Curve

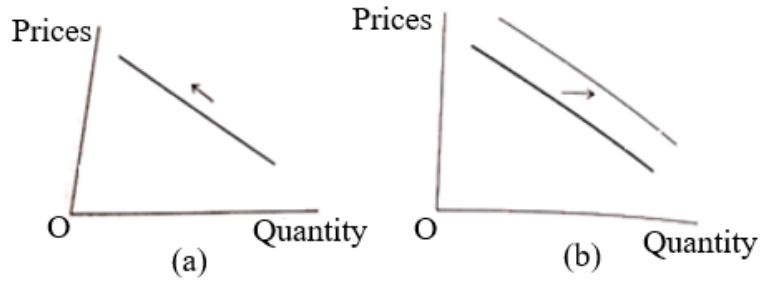


Fig. 2.15 Movement along a Demand Curve and Shift of a Demand Curve. Panel (a) depicts a movement along the demand curve and panel (b) depicts a shift of the demand curve.

Market Demand: The total amount of goods demanded by the market by all buyers at different prices over a period of time is known as market demand.

Elasticity of Demand:

- Price fluctuations in demand measure the extent to which price change affects product demand among its consumers.
- It is calculated by dividing the percentage conversion into the required value of the product by the percentage change in the product cost. This is also called the percentage of elasticity of demand,

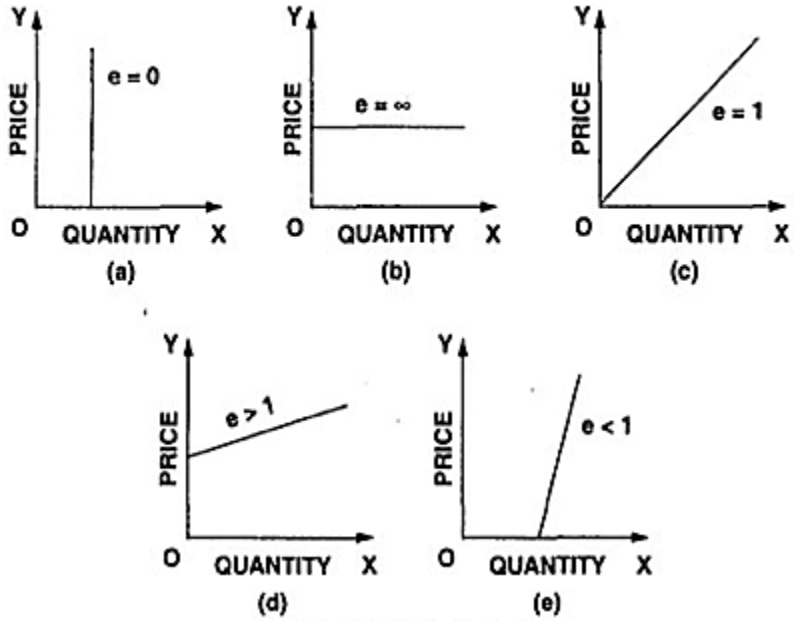
ed = percentage change of positive / percentage change of positive value
ed = △ Q / △ P × P / Q

Here,
ed = Strength of demand
△ Q △ Q = Change in quantity
△ P △ P = Price fluctuations
P = Initial price
Q = Initial Value

Situations of Elasticity of Demand:

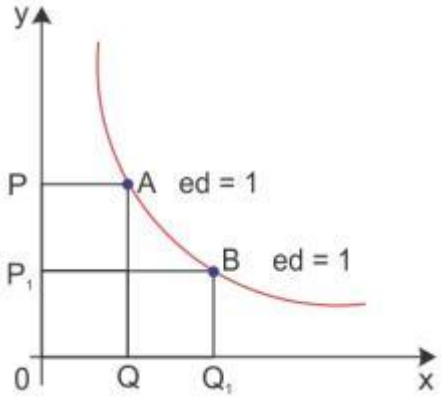
1. **E_d= 1:** Also, called unitary elastic demand, or rectangular hyperbola. When change in demand and change in price is in the same proportion. A 10% increase in price leads to a 10% decrease in demand.
2. **E_d> 1:** When change in demand is greater than the change in price. A 10% fall in price leads to a 30% increase in demand.
3. **E_d< 1:** When change in demand is less than the change in price. A 30% decrease in price leads to a 10% increase in demand.
4. **E_d= ∞:** It is also called perfectly elastic demand, as here the demand is infinity at the current price. Any change in price would cause demand to fall to zero.

5. **E_d= 0:** It is called perfectly inelastic demand, as here, irrespective of price change, demand remains constant.



Rectangular Hyperbola (ed = 1):

Rectangular hyperbola is a curve with equal rectangular areas on all sides. If the extension of need is equal to one (ed = 1) at all points near the quilt curve, the quest curve is actually a rectangular hyperbola. As given in the image below it is a curve facing downwards.



The Geometric Method of Elasticity of Demand:

The flexibility of the search is measured in any position by dividing the length of the lower part of the search curve by the length of the upper part of the curve required at that point. In the center of any desired curve, the ed value is one.

The elasticity of the search line with a line can be easily checked with pictures. The elasticity of the need in each area of the vertical line search curve is determined by the ratio between the required curve segments lower and higher in that area.

ed = DA / DB

Total Expenditure Method of Elasticity of Demand:

- Calculates demand volatility based on changes in total cost (Product Price and Value) acquired by the asset due to price fluctuations.
- The price of an asset and its demand are linked in the opposite direction.
- The reaction of an asset to a change in price determines whether the cost of a positive increase or decrease due to its inflation.

Relationship between Total Expenditure and Price of Elasticity of Demand:

- Ed = 1Ed = 1 If the use of a lump sum (X value of the quantity) remains unchanged despite the increase or decrease in the asset price.
- Ed> 1Ed> 1 When prices fall, total costs go up, and when prices go up, total costs go down.
- Ed <1Ed <1 When the total cost decreases due to inflation and the total cost increases due to inflation.

Factors influencing price elasticity of demand:

- **Availability of close substitute:** The demand for equity is often more extensive than the demand for fixed assets. Coca-Cola, Pepsi, Limca, and other similar drinks are worth replacing. Even a small increase in the price of coke will entice consumers to look for alternatives. Demand for electricity, on the other hand, will decrease because there are no other nearby.
- **Nature of the Commodity:** The demand for essential commodities such as medicines and food grains is not as widespread as we should use it at the lowest possible cost, regardless of price. In any case, the flexibility and versatility of refrigerators, air conditioners and so on are conditional on the grounds that their use may be delayed in the future if costs increase.
- **Price level:** The need for expensive goods such as air conditioners or cars is often more flexible than the need for cheap goods such as a matchbox or pencils.
- **Income level:** Higher income groups have less flexible need for assets than lower income groups. For example, if the price of a commodity rises, a wealthy consumer will not reduce his demand, and a poor consumer may reduce it.

Q1. Worth a rupee to a consumer is called:
(a) marginal utility of money
(b) total utility of money
(c) diminishing marginal utility of money
(d) consumer's equilibrium

Q2. A consumer reaches the point of equilibrium when.
(a) MRSxy>Px/Py
(b) MRSxy<Px/Py
(c) MRSxy = Px/Py
(d) none of these

Q3. At equilibrium, the slope of the indifference curve is _____.
(a) Equal to the slop of budget line
(b) Greater than the slop of budget line
(c) Smaller than the slop of budget line
(d) none the above

Q4. Additional utility derived from the consumption of an additional unit of a commodity is called:
(a) Average utility
(b) total utility
(c) Marginal utility
(d) none of these

Q5. the slope indifference curve is equal to:
(a) One
(b) marginal rate of substitution
(c) Marginal utility
(d) none of these

Q6. Why is indifference curve convex to origin?
(a) Due to law of diminishing marginal utility
(b) Due to monotonic preferences
(c) Due to continuous decline of marginal rate of substitution
(d) Both a and b

Q7. Which of the following is not the property of indifference curve?
(a) Higher the indifference curves higher the level of satisfaction.
(b) Two indifference curves cannot intersect each other
(c) Indifference curve is concave to origin
(d) Indifference curve is downward sloping

Q8. An Indifference curve slope down towards right since more of one commodity and less of another result in:
(a) Same satisfaction.
(b) Greater satisfaction.
(c) Maximum satisfaction.
(d) Decreasing expenditure.

Q9. A shift in budget line, when prices are constant, is due to:
(a) Change in demand

(b) change in income
(c) Change in preferences
(d) change in utility

Q10. Marginal rate of substitution of X for Y is calculated as:
(a) Px/Py
(b) Py/Px
(c) Change in Y / change in X
(d) change in X/ change in Y

Q11. MRS is determined by:
(a) satisfaction level of the consumer
(b) income of the consumer
(c) taste of the consumer
(d) preferences the consumer

Q12. At the point of equilibrium:
(a) MRS>Px/Py and IC is convex at the point of equilibrium
(b) MRS<Px/Py and IC is convex at the point of equilibrium
(c) MRS=Px/Py
(d) MRS>Px/Py and IC is convex at the point of equilibrium

Q13. specific quantity to be purchased against a specific price of the commodity is called:
(a) Demand
(b) quantity demand
(c) Movement along demand curve
(d) shift in demand

Q14. The graphic presentation of a table showing price and relationship for a commodity in the market is called:
(a) Individual demand curve
(b) producer's demand curve
(c) Market demand curve
(d) consumer's demand curve

Q15. Which of the following pairs represents substitute goods?
(a) car and petrol
(b) juice and cold drink
(c) bread and butter
(d) all of these

Q16. In case of Giffen's paradox, the slope of demand curve is:
(a) negative
(b) positive
(c) parallel to X-axis
(d) parallel to Y-axis

Q17. As a result of rise in consumer's income, demand curve for coarse grain (inferior good):
(a) becomes a horizontal straight line
(b) becomes a vertical straight line
(c) shifts to the right

(d) shifts to the left

Q18. Demand curve is upward sloping for:
(a) normal goods
(b) inferior goods
(c) Giffen goods
(d) none of these

Q19. Movement along the demand curve occurs due to change in:
(a) own price of the commodity
(b) determinants of demand, other than own price of the commodity
(c) both (a) and (b)
(d) none of these

Q20. An increase in the price of electricity will cause the demand for electric appliances to:
(a) rise
(b) fall
(c) remain the same
(d) none of these

Q21. Shift in demand curve means:
(a) fall in demand due to rise in own price of the
(b) rise in demand due to fall in own price of the
(c) change in demand due to factors other than own price of the commodity
(d) none of these

Q22. Increase in demand occurs due to:
(a) decrease in price of the complementary good
(b) increase in income of the consumer
(c) increase in price of the substitutes
(d) all of these

Q23. Assumptions of the law of demand refer to:
(a) constant own price of the commodity
(b) determinants of demand, other than own price of the commodity
(c) constant cost of production
(d) none of these

Q24. Substitution effect takes place when price of the commodity becomes:
(a) relatively cheaper
(b) relatively dearer
(c) stable
(d) both (a) and (b)

Q25. In case of normal goods, the relationship between own price of the commodity and its quantity demanded is:
(a) constant
(b) inverse
(c) positive
(d) none of these

Q26. Complementary goods:
(a) complete the demand for each other
(b) are substituted for each other
(c) are demanded together
(d) both (a) and (c)

Q27. In case of low-level commodities, income effect is _____.
(a) negative
(b) positive
(c) zero
(d) infinite

Q28. In case of inferior goods:
(a) income effect is negative
(b) income effect of positive
(c) income effect is zero
(d) none of these

Q29. When income of the consumer rises in case of a normal good:
(a) demand curve shifts to the left
(b) demand curve shifts to the right
(c) there is upward movement along the demand curve
(d) there is downward movement along the demand curve

Q30. In case of contraction of demand, we move:
(a) from lower point to upper point on the same demand curve
(b) to right on another demand curve
(c) from upper point to lower point on the same demand curve
(d) to left on another demand curve

Q31. What is the law that defines the demand curve to slope downward known as?
(a)Diminishing marginal utility
(b) Utility maximisation
(c) Utility minimisation
(d) Consumer equilibrium

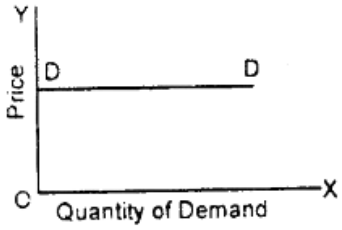
Q32. When MU is positive, what happens to TU?
(a) It decreases.
(b) It becomes the highest.
(c) It remains constant.
(d) It increases.

Q33. Why are indifference curves convex to the origin?
(a) Two goods are perfect complementary goods.
(b) Two goods are imperfect substitutes.
(c) Two goods are perfect substitutes.
(d) None of the above

Q34. Which of the following statements about the demand curve is true?
(a)The slope of the demand curve is upward from left to right
(b)The slope of the demand curve is downward from left to right

(c)The slope of the demand curve is parallel to the X-axis
(d)The slope of the demand curve is parallel to the Y-axis

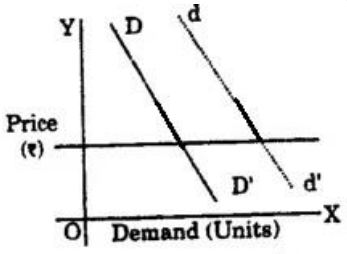
Q35. Following figure shows:



(a) High Elastic Demand
(b) Perfectly Elastic Demand
(c) Perfectly Inelastic Demand
(d) Inelastic Demand

Q36. CDM stands for _____
(a) Consumer Development Model
(b) Consumer Decision Mix
(c) Consumer Decision Making
(d) Consumer Development Matrix

Q37. The demand curve of a good shifts from DD' to dd



(a) fail in the price of the goods
(b) rise in the price of the goods
(c) rise in the price of substitute goods
(d) rise in the price of complementary goods

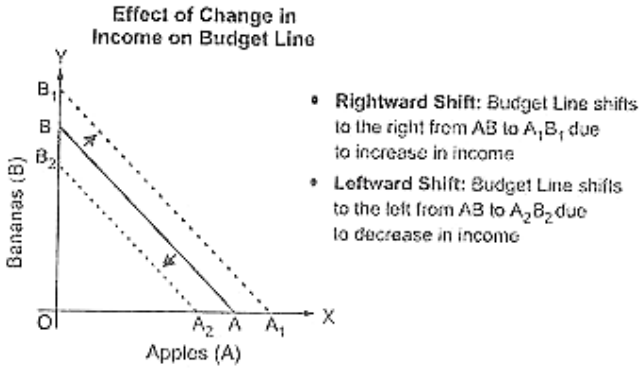
Q38. A consumer will purchase more of Good−X than Good−Y, only when:
(a) MUx/Px = MUm
(b) MUx/Px <MUy/Py
(c) MUy/Py = MUm
(d) MUx/Px > MUy/Py

Q39. As we move down the indifference curve left to right, the slope of indifference curve tends to:
(a) Unity
(b) rise
(c) Zero
(d) declines

Q40. In indifference map, higher IC indicates:
(a) Lower level of satisfaction
(b) same level of satisfaction
(c) Higher level of satisfaction
(d) either higher or same level of satisfaction

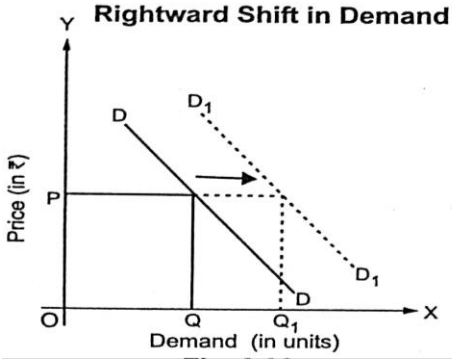
SOLUTIONS

S1. Ans. (a)
S2. Ans. (c)
Sol. In terms of indifference curve approach, a consumer strikes his equilibrium when.
Slope of IC = Slope of Price Line
Or
MRSXY=PY / PX
It is here only that the consumer maximises his satisfaction (given PX, PY and income of the consumer).
S3. Ans. (d)
Sol. This is the point at which the consumer is spending all his income and purchasing the right of amount of both goods to maximize his level of satisfaction.
S4. Ans. (c)
Sol. Marginal utility is the additional utility derived from the consumption of one more unit of the given commodity. It is the utility derived from the last unit of a commodity purchased.
S5. Ans. (b)
Sol. The consumer will be satisfied at any point along the curve assuming that other things are constant. The slope of the indifference curve is the marginal rate of substitution (MRS). The MRS is the amount of a good that a consumer is willing to give up for a unit of another good, without any change in utility.
S6. Ans. (c)
S7. Ans. (c)
Sol. 'Indifference curves of imperfect substitutes are concave to the origin' is not the basic property of indifference curves. Explanation: An indifference curve is a graph showing a combination of two goods that give the consumer equal satisfaction and utility.
S8. Ans. (a)
Sol. An indifference curve slopes down towards right since more of one commodity and less of another result same satisfaction to the consumer.
S9. Ans. (b)
Sol. Effect of a Change in the Income of Consumer: If there is any change in the income, assuming no change in prices of apples and bananas, then the budget line will shift. When income increases, the consumer will be able to buy more bundles of goods, which were previously not possible. It will shift the budget line to the right from 'AB' to 'A1B1', as seen in figure. The new budget line A1B1 will be parallel to the original budget line 'AB'. Similarly, a decrease in income will lead to a leftward shift in the budget line to A2B2. Hence, correct answer is option B.



S10. Ans. (c)
S11. Ans. (d)
S12. Ans. (d)
S13. Ans. (b)

Sol. Specific quantity to be purchased against a specific price of the commodity is called Quantity demanded.
The amount demanded is the amount of the commodity that people are prepared to buy at a certain price at a given time.
At different prices, different quantities can be requested at a specific time. The demand curve is formed when all prices, along with the quantity demanded, are drawn on the graph.
Depending on factors like recession, changes in customer preferences, etc., quantity required will vary at the same price.
S14. Ans. (c)
S15. Ans. (b)
Sol. Juice and cold drinks can be taken in place of each other. Therefore,they are substitute goods as substitute goods are those goods where demand of one good rises when the price of another good gets increased.
S16. Ans. (b)
S17. Ans. (d)
S18. Ans. (c)
Sol. A Giffen good is a low income, non-luxury product for which demand increases as the price increases and vice versa. A Giffen good has an upward-sloping demand curve which is contrary to the fundamental laws of demand which are based on a downward sloping demand curve.
S19. Ans. (a)
S20. Ans. (b)
S21. Ans. (c)
S22. Ans. (d)
Sol. In addition to change in prices of related goods and income of the consumer, the demand curve also shifts due to various other factors. Following is the curve representing the increase in demand. Hence, correct answer is option D.



Demand curve shifts towards right because of:

- Increase in price of Substitute Goods
- Decrease in price of Complementary Goods
- Increase in income (Normal Goods)
- Decrease in income (Inferior Goods)
- Increase in Population
- Tastes in favour of commodity
- Expectation of future increase in price

S23. Ans. (b)
S24. Ans. (d)
S25. Ans. (b)
S26. Ans. (d)
Sol. Complementary goods are those goods which are complementary to one another in the sense that they are used jointly or together such as car and petrol, pen and ink etc. There is an inverse relationship between the demand for the good and the price of its complements. For example, an increase in the price of petrol not only causes a decrease in the demand for petrol, but also leads to a decrease in the demand for cars. Thus, in case of complementary goods, an increase in the price of one result in decrease in the quantity demanded of the other, and vice versa.
S27. Ans. (a)
Sol. An income effect is positive in case of normal goods. There is direct relationship between income and quantity demanded. Income effect is negative in case of inferior goods (including Giffen goods) where we find inverse relationship between income and quantity demanded.

S28. Ans. (a)
Sol. Inferior goods are those in case of which there is the negative (or inverse) relationship between income and quantity demanded. Other things remaining constant, quantity demanded decreases in response to increase in consumer's income and vice versa.

- Giffen goods are those inferior goods in the case of which there is a positive relationship between price and quantity demanded.
- Giffen goods are highly inferior goods, showing a very high negative income effect.
- As a result, when the price of such commodities falls, their demand also falls, even when they happen to be relatively cheaper than other goods.
- This is popularly known as the 'Giffen Paradox'.
- The income effect is negative.

S29. Ans. (b)
S30. Ans. (a)
S31. Ans. (a)
Sol. Demand curve slopes downward because of the law of Diminishing marginal utility. The law of diminishing marginal utility states that with each increasing quantity of the commodity, its marginal utility declines.
S32. Ans. (d)
Solution
If MU is positive, the value of TU increases with an increase in the consumption of the commodity.
S33. Ans. (b)
S34. Ans. (b)
Sol. Demand curve slopes downward from left to right because of the law of diminishing marginal utility. According to this law, the utility/satisfaction of the consumer goes on decreasing with every additional consumption of the commodity and hence, the consumer will buy more goods only when the price decreases. Other reasons are income effect, substitution effect, different uses of commodity etc.
S35. Ans. (b)
Sol. Perfectly elastic demand is when the demand for the product is entirely dependent on the price of the product. This means that if any producer increases his price by even a minimal amount, his demand will disappear. Customers will then switch to a different producer or supplier.
S36. Ans. (c)
S37. Ans. (c)
S38. Ans. (d)
Sol. Law of diminishing marginal utility states that as consumption increases the marginal utility declines. A consumer will purchase more of good X when marginal utility derived from the consumption of good X is greater than the marginal utility derived from the consumption of good Y. The consumer through consumption of more of Good X decrease the marginal utility of good X, so as to equate the utilities derived from both the goods and achieve consumer's equilibrium.
S39. Ans. (d)
S40. Ans. (c)