

QUESTION BANK

Consumer's equilibrium and demand

Multiple choice questions : choose the correct answer

1. 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
2. A consumer attains equilibrium, in case of one commodity, when:
(a) $MU_x = P_x$ (b) $MU_x > P_x$
(c) $MU_x < P_x$ (d) $MU_x = 0$
3. Consumer equilibrium in case of two commodities (say X and Y) is struck when:
(a) $MU_x/P_x = MU_m$ (b) $MU_x/P_x > MU_y/P_y$
(c) $MU_x/p_x = m_u_y/p_y = MU_m$ (d) $MU_x/P_x < MU_y/P_y$
4. A consumer reaches the point of equilibrium when;
(a) $MRS_{xy} > P_x/P_y$ (b) $MRS_{xy} < P_x/P_y$
(c) $MRS_{xy} = P_x/P_y$ (d) none of these
5. A consumer will start buying less of good-X and more of Good-Y, when:
(a) $MU_x/P_x = MU_m$ (b) $MU_x/P_x < MU_y/P_y$
(c) $MU_y/P_y = MU_m$ (d) $MU_x/P_x > MU_y/P_y$
6. According to IC approach, at the point of equilibrium:
(a) slope of IC > slope of price line (b) slope of IC < slope of price line
(c) Slope of IC \neq slope of price line (d) slope of IC = slope of price line
7. when rupee worth of satisfaction is greater for Y than x, it implies that;

(a) $MU_x/P_x = MU_y/p_y$

(b) $MU_x/P_x > MU_y/P_y$

(c) $MU_x/P_x < MU_y/p_y$

(d) none of these

8. in the case of $mux > muy/py$;

(a) Consumer will shift some expenditure from x to y

(b) Consumer will shift some expenditure from y to x

(c) Consumer will spend less on both x and y

(d) Consumer will spend x and y

9. 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

10 the slope indifference curve is equal to:

(a) One

(b) marginal rate of substitution

(c) Marginal utility

(d) none of these

11. 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

12. it is the property of indifference curve that no two IC can intersect each other. The reason behind this is:

(a) Consumer preferences are monotonic

(b) Preferences are complete

(c) Same combination of two goods cannot give different level of satisfaction

(d) Diminishing marginal rate of substitution

13. Slope of budget line is:

(a) P_x/P_y

(b) P_y/P_x

(c) MRS

(d) $P_x \cdot P_y$

14. 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

15. 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.

16. Hicks and Allen believed that utility:

(a) Cannot be measured

(b) Cannot be expressed

(c) Can be measured in cardinal numbers

(d) Can be measured in ordinal numbers

(c) Change in Y / change in X (d) change in X/ change in Y

▲
22. A set of ICs drawn in a graph is called:

(a) Indifference curve (b) indifference map

(c) budget line (d) all of these

▲
23. 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

24. MRS is determined by:

(a) satisfaction level of the consumer (b) income of the consumer

(c) taste of the consumer (d) preferences the consumer

25. At the point of equilibrium:

(a) $MRS > P_x/P_y$ and IC is convex at the point of equilibrium

(b) $MRS < P_x/P_y$ and IC is convex at the point of equilibrium

(c) $MRS = P_x/P_y$

(d) $MRS > P_x/P_y$ and IC is convex at the point of equilibrium

26. In a situation when $MRS > P_x/P_y$, the consumer would react by:

(a) Diminishing the consumption of commodity-x

(b) Increasing the consumption of commodity-y

(c) Increasing the consumption of commodity-x

(d) None of these

27. Two indifference curves cannot cut each other because:

(a) They slope downwards.

(b) They are convex to origin

(c) They represent those combinations of two goods that give the same satisfaction.

(d) Each indifference curve represents a different level of satisfaction

28. 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

29. 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

30. When at price of Rs. 5 per unit of a commodity, A's demand is for 11 units, B's demand is for 14 units and C's demand is for 8 units, then market demand will be:

(a) 11 units

(b) 14 units

(c) 17 units

(d) 33 units

31. Downward slope of the demand curve shows:

(a) positive relationship between price and quantity demanded

(b) inverse relationship between price and quantity demanded

(c) no relationship between price and quantity demanded

(d) none of these

32. How are two goods (apple and orange) related when, as a result of rise in the price of apples, demand for oranges increases?

- (a) substitute goods
- (b) complementary goods
- (c) normal goods
- (d) inferior goods

33. In case of normal goods, demand curve shows:

- (a) a negative slope
- (b) a positive slope
- (c) zero slope
- (d) none of these

34. Law of demand must fail in case of:

- (a) normal goods
- (b) giffen goods
- (c) inferior goods
- (d) none of these

35. Inferior goods are those whose income effect is:

- (a) negative
- (b) positive
- (c) zero
- (d) none of these

36. 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

37. 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

38. 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

39. If two goods are complementary then rise in the price of one results in:

- (a) rise in demand for the other
- (b) fall in demand for the other
- (c) rise in demand for both
- (d) none of these

40. Demand curve is upward sloping for:

- (a) normal goods
- (b) inferior goods
- (c) giffen goods
- (d) none of these

41. 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

42. 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

43. 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

44. A fall in income of the consumer (in case of normal goods) will cause:

- (a) upward movement on the demand curve
- (b) downward movement on the demand curve

(c) rightward shift of the demand curve

(d) leftward shift of the demand curve

45. Change in quantity demanded of a commodity due to change in its own price, other things remaining constant, is called:

(a) cross price effect

(b) price effect

(c) income effect

(d) substitution effect

46. In case of contraction of demand, we move:

(a) from lower point to upper point on the same demand curve

(b) to right on the another demand curve

(c) from upper point to lower point on the same demand curve

(d) to left on the another demand curve

47. 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

48. 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

49. Law of demand is violated when:

- (a) income effect is negative
- (b) substitution effect is negative
- (c) negative income effect is greater than substitution effect
- (d) negative income effect is less than substitution effect

50. A fall in own price of the commodity leads to:

- (a) increase in real income of the consumer
- (b) decrease in real income of the consumer
- (c) increase in purchasing power of the consumer
- (d) both (a) and (c)

51. Substitution effect takes place when price of the commodity becomes:

- (a) relatively cheaper
- (b) relatively dearer
- (c) stable
- (d) both (a) and (b)

52. Different quantities purchased at different possible prices of a commodity is called:

- (a) demand schedule
- (b) quantity demanded
- (c) demand function
- (d) individual demand

53. Diagrammatic presentation of demand schedule of an individual buyer of a commodity in the market yields:

- (a) market demand schedule
- (b) individual demand curve
- (c) individual demand schedule
- (d) market demand curve

54. Goods are undemanded because these possess:

- (a) utility
- (b) capacity

(c) needs (d) none of these

55. Complementary goods:

(a) complete the demand for each other (b) are substituted for each other

(c) are demanded together (d) both (a) and (c)

56. In case of normal goods, the relationship between income and quantity demanded is:

(a) negative (b) positive

(c) zero (d) infinite

57. 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

58. An exception to the law of demand is:

(a) normal good (b) Giffen good

(c) article of distinction (d) both (b) and (c)

59. Distribution of income is a determinant of:

(a) individual demand function (b) market demand function

(c) both (a) and (b) (d) none of these

60. In case of giffen goods, demand curve is:

(a) upward sloping (b) downward sloping

(c) parallel to X-axis (d) parallel to Y-axis

61. When increase in the price of one good causes an increase in demand for the other, the goods are:

(a) substitutes

(b) complementary

(c) inferior

(d) giffen

62. In case of inferior goods:

(a) income effect is negative

(b) income effect of positive

(c) income effect is zero

(d) none of these

63. Shift in demand curve occurs when demand for a commodity changes due to change in:

(a) own price of commodity

(b) determination of demand, other than own price of the commodity

(c) both (a) and (b)

(d) none of these

64. Change in quantity demanded of a commodity due to change in real income of the consumer caused by change in own price of the commodity is called:

(a) cross price effect

(b) price effect

(c) income effect

(d) substitution effect

65. 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

66. An increase in the price of computer will cause the demand for internet services to:

(a) rise

(b) remain the same

(c) fall

(d) none of these

Ans- 1.(A), 2.(A), 3.(C), 4.(C), 5(b), 6(d), 7(c), 8.(b), 9.(c), 10.(b), 11.(c), 12.(c), 13.(a), 14.(c), 15.(a), 16.(d), 17.(c), 18.(d), 19.(d), 20.(b), 21.(C), 22.(b), 23.(c), 24.(d), 25.(d), 26.(c), 27.(d), 28.(b), 29.(c), 30.(d), 31.(b) , 32.(a) , 33.(a) , 34.(b) , 35.(a) , 36.(b) , 37.(b) , 38.(d) , 39.(b) , 40.(c) , 41.(a) , 42.(b) , 43.(c) , 44.(d) , 45.(b) , 46.(a) , 47.(d) , 48.(b) , 49.(c) , 50.(d) , 51.(d), 52.(a) , 53.(b) , 54.(a) , 55.(d) , 56.(b) , 57.(b) , 58.(d) , 59.(b) , 60.(a) , 61.(a) , 62.(a) , 63.(b) , 64.(c) , 65.(b) , 66.(c)

Q1. What do you mean by consumer equilibrium?

A Consumer equilibrium is a situation in which a person gets maximum satisfaction

Q 2.What do you mean by utility?

A Want satisfying power of any commodity is known as consumer equilibrium.

Q3. What is Total Utility?

A It is the sum total of utility derived from the consumption of all units of a commodity.

Q4. What is Marginal Utility?

A it refers to additional utility on account of the consumption of an unit of a commodity.

Q 5.What is Budget line?

A It refers to attainable combinations of sets of two commodity at given prices of commodity and income of the consumer.

Q6. Define Indifference set :-

Indifference set is a set of two commodities which offers the consumer same level of satisfaction, so that he is indifferent between these combinations

Q7. Define Indifference Curve

Indifference Curve is the diagrammatic presentation of an indifference set. It shows the set of two commodities that offers the consumer the same level of satisfaction, so that he is indifferent between these combinations

Q8. Define Indifference Map

Indifference Map refers to a set of indifference curves.

Q9. Define Budget Line

It refers to the attainable combinations of a set of two goods at given prices of goods and income of the consumer

Q10. What is the exception of utility approach

Utility can be cardinally measurable, i.e. can be expressed in exact units.

Utility is measurable in monetary terms

Q11. Define demand schedule

Demand schedule expresses the relations between different quantities of the commodity demanded at different prices in form of a table.

12. How is Total utility derived from marginal utilities?

Total utility is derived by summing up the marginal utilities

13. What is Law of Diminishing Marginal Utility?

Law of diminishing marginal utility states that as more and more standard units of a commodity are consumed continuously marginal utility must decline

14. Under what situation total utility will be maximum?

When Marginal utility will be zero

15. State condition of consumer's equilibrium in respect of one good.

$$MUX = Px$$

16. Define Demand.

An economic principle that describes a consumer's desire and willingness to pay a price for a specific good or service. Holding all other factors constant, the price of a good or service increases as its demand increases and vice versa.

17. What is meant by Marginal Rate of Substitution (MRS)

MRS is the amount of good 2 what consumer is willing to give up for getting an extra unit of good 1.

18. Define consumer's bundle

Combination of the amount of two goods will be called as consumption or consumer bundle

19. What is budget set

The set of bundles available to the consumer with his given income at prevailing market price is called the budget set.

20. When will exception of law Demand happen

Exception to the law of demand happens when there is a direct relationship between price and demand. Thus rise in price leads to rise in demand and fall in price leads to fall in demand

21. How is budget line defined?

Budget line is a line showing all different possible combinations of two goods which a consumer can buy in given his budget and the price of both goods.

22. Why does higher indifference curve give more satisfaction?

Higher indifference curve shows a higher level of satisfactions. It shows the various combinations of excess quantity of two goods than lower indifference curve.

23. What is the impact of diminishing marginal rate of substitution on indifference curve?

Indifference curve become convex towards the origin

24. What will be the impact on the equilibrium due to increase in income in case of normal good?

Equilibrium will be shifted on a higher indifference curve.

25. How is market demand schedule derived with the help of individual demand schedules?

By lateral summations of individual curves

26. Define normal good.

These are the goods, the demand for which increases as income of the buyer rise. There is positive relation between income and demand of these goods.

27. How does availability of substitute good affect the elasticity of demand?

The demand of a good becomes elastic if its substitute good is available in the market

28. Demand of good 'X' falls due to increase in the income of the consumer what type of good 'X' is

Good 'X' is an inferior good.

29. What will be the impact on demand of the substitute good due to increase in price of the good?

The demand of substitute good will increase

30. A rise in price of a good results in a decrease in expenditure on it. is its demand elastic or inelastic?

Elastic

31. What is meant by market demand?

Market demand is the sum of total demand of all the consumers in the market at a particular time and at a given price.

32. What cause an upward movement along a demand curve?

Increase in price while other factors are constant

33. If the number of consumers increase in which direction will the demand curve shift?

Demand curve shifts in Rightward Direction

34. If the slope of a demand curve is parallel to X-axis, what will be the elasticity of demand?

Perfectly elastic

35. Why is elasticity of demand negative?

Due to inverse relation between price and demand.

36. Why is demand of water inelastic?

Because water is a necessity good.

37. A straight line demand curve is given. What will be elasticity of demand on the mid point of this curve.

Equal to unit

38. What happens to total expenditure on a commodity when its price falls and its demand is price elastic?

Total expenditure will increase.

39. Why does total utility increase at a diminishing rate due to continuous increase in units of a good consumed?

As more and more units of commodity are consumed, marginal utility derived from each successive unit tends to diminish so total utility increases at diminishing rate up.

40. Due to decrease in price of pen why does the demand of ink increase?

These are complimentary goods.

41. When does budget line shift leftwards?

When the income of consumer decreases.

42. Under what situation does the slope of changed budget line be flatter?

When there is decrease in price of a good showing on X-axis is constant.

42. What change should take place in price of the combination of two goods so that the slope of budget line becomes steeper?

When there is increase in price of good showing on X-axis while price of good showing on y-axis is constant.

43 . What will be the behaviour of total utility when marginal utility curve lies below X-axis

Total utility start to decline

44. What are the Assumptions Law of demand?. State any two.

1. There should be no change in the income of the consumer.
2. Price of the related goods must remain constant

45. Meaning of law of demand

The law of demand states that other things being equal or constant, the demand for a commodity is inversely related to its price. The price increases, the demand falls and vice-versa.

46. How Exceptions to the law of demand occur

1. Inferior goods

2. Expectations regarding the future prices

47. Define Elasticity of Demand

Elasticity of demand refers to the sensitiveness or responsiveness of demand to changes in price. Price elasticity of demand is usually referred to as elasticity of demand

48. Define Price Elasticity of Demand

It is the ratio of proportionate change in quantity demanded of a commodity to a given proportionate change in its price

49 Explain the types of Elasticity of Demand

1. Perfectly elastic demand
2. Perfectly inelastic demand:
3. Relatively elastic demand
4. Relatively Inelastic demand:
5. Unitary elastic demand:

50. What are the Factors Influencing the Elasticity of Demand ?

1. Degree of necessity

2.Proportion of consumer's income spent on the commodity

DEMAND

Q1. What is demand?

Ans: - Demand refers to the quantity of a commodity or service a consumer is willing to buy at given price in a given period of time.

Q2. What is Demand Schedule?

Ans. Demand Schedule refers to the quantity of a commodity which is demanded by the consumers at different prices.

Q3. What is an Individual Demand Schedule?

Ans. Individual Demand Schedule refers to the relationship between price and quantity demanded of a commodity by an individual.

Price Rs.	Quantity
1	10
2	8
3	6
4	4
5	2

Q4. What is Market Demand Schedule? Explain with table & diagram.

Ans. Market Demand Schedule is the sum of the individual demand schedule for a commodity in the market at different prices of the commodity.

On the assumption that there are three buyers in the market, Market Demand Schedule may be drawn as follows.

Price per Unit/ Firm	A	B	C	Total
1	10	5	20	35
2	8	4	16	28
3	6	3	12	21
4	4	2	8	14
5	2	1	4	7

Market Demand Curve

A Market Demand Curve has been drawn on the basis of table. The Market Demand Curve shows that, when price is Rs. 1 per Kg apple the total demand of the market is 35kg, but when price is increased to Rs.5 total demand of apples become 7kg. This slope of this demand curve is negative, showing inverse relationship between price of the commodity and its quantity demanded.

Q5. Define Normal Goods?

Ans. Normal good is a good, with the rise in income the demand for normal goods will rise because of rising purchasing power with increased income.

Income effect of normal goods is positive. Example: - Grain, Rice & wheat.

Q6. What are Giffen Goods?

Ans. Giffen goods are those inferior goods in case of which there is a positive relationship between price and quantity demanded.

Q7. Define Inferior Goods.

Ans. Inferior good is a good whose demand decreases with rise in income and increases with a fall in income of consumers. The Income Effect of Inferior Goods is Negative. For Example- . Coarse Gram

Q8. Explain Law of Demand with the help of Example

Ans. Law of Demand states that if the Price of a commodity decreases then consumer demand more of its quantity and if price increase than the consumer demand less of its quantity, other things being constant.

Price Rs.	Quantity
1	10
2	8
3	6
4	4
5	2

The table shows that when the price was Rs. 1, at that time the demand of the commodity was 10, but when the price increase to re 5 the demand for the commodity falls to 2 units.

Thus it is true with an increase in the price of the commodity demand decreases and with a fall in the price demand increases.

Q9. What are the factors affecting the Demand of a commodity?

Ans. Factors affecting the demand of a commodity are:-

Price of a commodity

Price is an important determinant of Demand. Demand for a commodity rises when it is offered at low price and it falls when the commodity is available at higher price.

Income of the consumer

With the rise in income of the consumer his purchasing power increases. As a result he can buy more of a commodity that he was not buying earlier due to monetary constraint. Similarly a fall in income of the consumer will force him to cut down his expenditure and he will demand less of a commodity.

Price of related goods

Related goods are of two types i.e. Substitute goods and complementary good.

Substitute Goods

Substitute goods are those which can be used in place of each other with equal ease. Example - Pepsi Cola and Coca-Cola. Of the two given goods the demand will be higher for the goods which have comparatively lower price and vice versa.

Complementary goods

Complementary Goods are those goods which are incomplete without each other. It is of each other.

Example - Car and Petrol

A fall in the price of one commodity leads to rise in the demand of its complementary good. Example: - If the price of petrol falls then demand for car will rise.

Taste and preferences

Tastes and Preferences of the consumers will also affect the demand of the commodity. A student will demand more of books and pens than utensils because of his preference for the same.

Similarly old television sets were replaced by Plasma T.V.

Miscellaneous

Some other factors that affect the demand of commodity are-

Demand for Seasonal Goods- The consumer will demand woolen clothes in winter only.

If Government Tax reduces Rate then it enhances the purchasing power of the consumer and his demand for goods will also increase.

If the population of an area increases then their demand will also increase and they will demand more consumer goods and vice versa.

Q10. How do changes in income affect demand for a commodity?

Ans. With the increase in income of the consumer his purchasing power increases, he can spend more than what he was spending earlier. Income affects demand for a commodity depends upon, whether a commodity

Normal Goods

The demand for normal goods rises with the increase in income of the consumer. I.e. income effect is positive. If the income of the consumer decreases then the demand for such goods also decreases.

Inferior Goods

For Inferior Goods Income, Effect is negative quality with the increase in income and vice versa.

Essential/Necessities

The goods that are essential for human beings are called necessities. The demand for such goods does not change with the increase or decrease in income.

Example- Life saving Drugs, Common Salt etc.

Q11. Why does Demand Curve for a commodity slope downwards to the right?

Ans. The Demand Curve for commodity slopes downwards to the right because of the following reason:.

Law of Diminishing Marginal Utility

The law states that with the consumption of an additional unit of a commodity, the utility from each successive unit goes on diminishing.

Example- Utility from first chapati /Loaf of Br from second chapatti is lesser, from the third still lesser, because a part of his hunger is satisfied from the first one and

the second in terms of satisfaction derived with each successive chapati diminishes. This depicts the Law of Diminishing Marginal Utility.

Income effect

A change in the quantity demanded as a result of change in real income caused by change in price of the commodity is called Income effect. When the price of a commodity falls, less has to be spent on the purchase of that commodity. From that money a consumer can buy more quantity of that good, thus the real income of the consumer is increased. However increase in the price of the good decreases the real income of the consumer. Therefore he will buy less of its commodity from that income.

Substitution effect

It means that substitution of one commodity in place of the other commodity when it becomes relatively cheaper Example=A rise in the price of coca-cola, in relation to coca-cola. The consumer will maximize his satisfaction therefore he will buy more of Pepsi than of coca cola.

Number of consumers

When the price of a commodity falls, consumers buy it at the reduced price, therefore the number of consumers increases because the old ones also consuming it in the same quantity or more than what they were consuming before fall in the price of that commodity.

Different uses of the commodity

A commodity used is consumed more at a lower price but if its price goes up then consumption get restricted to very essential use.

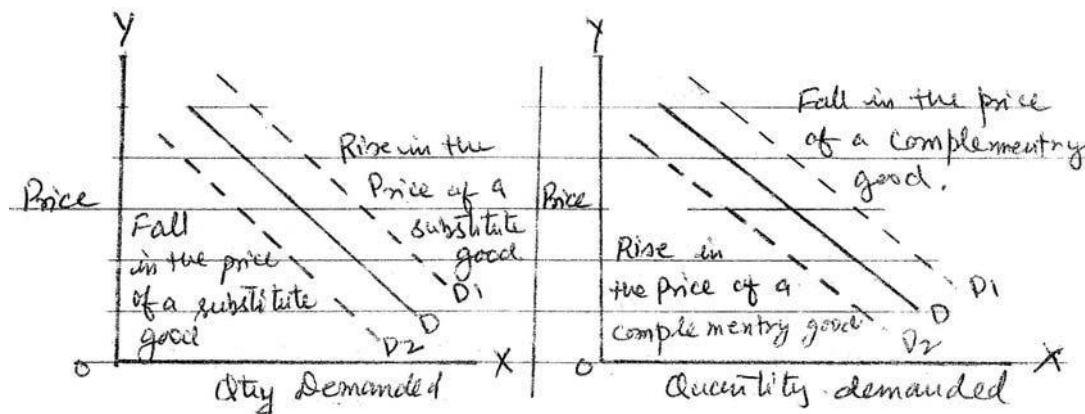
For example milk is used for many purposes e.g. Drinking, Making curd, paneer, tea etc. but if the price goes up the consumption of milk is restricted to say baby food only.

Q12. How is demand of a commodity affected by change in the price of related good? Explain with the help of a diagram.

Ans. Related goods may be of two types- Substitute goods Complementary good. When the price of a substitute food falls (rises) it becomes relatively cheaper (costlier), so it is substituted for the given commodity decreases (increases), this result in rightward (leftward) shift in demand curve.

When the price of complementary good falls (rises) its quantity demanded rises (falls). The demand for the given commodity increases (decreases) as complementary good are used together. This will cause a rightward (leftward) shift of demand curve of given commodity.

Diagrams showing the effect of Substitute Goods and Complementary Goods



Q13. What is meant by Cross Price Effects?

Ans. Cross Price Effect means how the demand for one particular product is affected by a change in the price of another commodity. Cross price effects originate from related goods:

- (a) Substitute good- If the price of tea falls, the quantity demanded for coffee would fall because people will use more of a tea than coffee.
- (b) Complementary good- If the price of car falls down, then quantity demanded for petrol would go up because people will purchase more car and petrol.

Q14. Briefly explain the factors that shift

ANS- The following are the factors that shift

1. Change in Income

if the income of the consumer increases the demand for the normal product increases similarly with the decrease in income the demand for the product decreases and the demand curve shift to the left. Increase in income shift the demand curve to the right.

2. Change in the of related goods

Substitute good- when the price of a substitute good falls (rises) then it becomes relatively cheaper or costlier, so it is substituted for the given commodity and the demand curve shift to the right or (left)

Complementary good- as the price of a complementary good increases, the price of the given product and its quantity demanded both decrease and the demand curve shift to the left. With the decrease in the price of the complementary good, the price of the given product and its quantity demanded both increase and the demand curve shift to the right.

Change in taste- A favourable change in the taste shift the demand curve to the right as a result price as well as the total quantity demanded will increase similarly an unfavourable change in taste will shift the demand curve to the left and both price and quantity will fall.

Q15. Distinguish between the following:

1. Contraction in Demand	Decrease in Demand
This is caused by change in the price only.	This is caused by change in the determinants of demand other than price.
It results in upward movement along demand curve when demand falls due to the rise in price only, it is called contraction in demand.	It results in the leftward shift in demand curve. When demand falls due to change in factors other than price it is called decrease in demand.

2. Extension in Demand	Increase in Demand
This is caused by change in price only	This is caused by change in the factors other than price of the commodity.
It results in downward movement along the demand curve. When demand increases due to fall in price only, it is called extension in demand.	It results in the rightward shift in demand curve. When demand increases due to change in factors other than price, it is called increase in demand.

3. Change in Quantity Demanded	Change in Demand
a) Change in quantity demanded is caused by change in the price of commodity.	a) Change in demand is caused by factors other than price of the commodity.
b) Change in quantity demanded is movement along demand curve.	Change in demand is shift in demand curve.
c) Example-Price of sugar falls from Rs. 16 per kg to Rs. 12 per kg as a result quantity demanded of sugar increases to 3kg from 2 kg	c) Example: if price of rice is Rs. 10 p/u, 20 gram rice is demanded. Even when price remains constant, consumer starts demanding 30 gram of rice.

4. Substitute goods	Complementary goods
1. Substitute goods may be used in place of each other	Complementary goods are used together.
2. The price of substitute goods has positive relationship with other substitute goods	The price of one complementary good has negative relationship with another complementary good.
Example- Car and Petrol	Example- Tea & Coffee

Normal Goods	Inferior Goods
1) Income effect is Positive.	1) Income effect is Negative
2) Demand increases with the increase in income	2) Demand increases with the decrease in income
3) Demand curve of normal goods slopes upward to the right	3) Demand curve of Inferior Goods slopes downward to the right.

Q16. Define Derived Demand.

Ans. Derived Demand is the demand that has been derived from the demand for some other commodity it helps to produce. Demand for factors of production is called derived demand because it is derived from demand of such goods, which the factor helps to produce.

Example- Demand for Shoe is direct demand but the demand for Labour is Derived Demand because it does not satisfy the consumer demand directly but it arises due to demand for shoe.

Q 17. Determine how the following changes will affect the Market Demand Curve for a Product:

a) A new Plant comes in Jharkhand. Many people who were previously unemployed are now employed. How will this affect the White TV in the region?

Ans – An increase in income of households will result in the increase in demand for TV sets. The demand curve for both TVs will shift rightward.

b) There are train and bus services between fare between New Delhi and Jaipur comes down for bus travel between the two cities?

Ans- Train and bus services are substitute to each other. If train fair comes down the demand for bus travel will decrease as a result there would be left ward shift of demand curve for the bus travel

Q 18. What is the importance of Elasticity of Demand?

Price Elasticity of Demand is a useful concept for the following reasons:

(a) **Producer**- A producer adopts a price discriminatory policy when elasticity of demand from different consumers is different. Those consumers for whom demand is inelastic can be charged a higher price than those with more elastic demand.

(b) **Foreign Trade**- The country in which a product has less elastic demand can be charged a higher price than a country having a more elastic demand

(c) **Government**- Goods and services like cigarettes, have inelastic demand. The Government taxes inelastic, so that the scale of such commodities does not fall and burden of tax is borne by rich class.

(d) **Factor Pricing**- Factors having less elastic demand can charge higher prices than those having more elastic demand. For Example A Pilot gets more salary as compared to Doctors, since their demand is less elastic. The concept of elasticity helps in explaining the relative shares to factors of production in the output.

Example 1 Price of a good falls from Rs. 100 to Rs. 80. As a result its demand rises from 4000 units to 5000 units. Calculate Price Elasticity of Demand by Expenditure Method

Original expenditure = $P \times Q$ -

= $100 \times 4000 = 4,00,000$ Expenditure after increase in Price = 80×5000

= 4,00,000

since the total expenditure is same even after the change in price, the elasticity of demand is unity

$$E_d = 1$$

Example 2

A consumer demands 1000 units of the price of Re 10 per unit. If the price of the said commodity is increased to Rs.14, the demand for the product falls to 600.

Calculate Price Elasticity of Demand.

$$E_d = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$
$$= \frac{1}{4} \times \frac{10}{1000}$$
$$= 1$$

Demand is Unity elastic.

$$P = 10$$
$$P_1 = 14$$
$$\Delta P = 4$$
$$Q = 1000$$
$$Q_1 = 600$$
$$\Delta Q = -400$$

The ED for good x is known to be twice that of good X price of X falls by 5% while that of good Y rises by 5%. What is the % age change in the quantities of X and Y?

$$E_d \text{ of } Y = \frac{\% \text{ Change in demand}}{\% \text{ Change in price}}$$

$$1 = \frac{\% \text{ Change in demand}}{5}$$

$$\% \text{ Change in demand} = 1 \times 5\%$$

Consumers' Equilibrium

Q1. What is Consumers' Equilibrium?

Ans. A consumer is in a state of equilibrium when he maximizes his satisfaction by spending his given income on different goods and services.

Q2. Define Total Utility (TU)

Ans. Total utility is the total psychological satisfaction derived by a consumer from consumption of all units of a particular commodity.

Q3. Define Marginal Utility (MU)

Ans. Marginal utility is the additional utility derived from consumption of an additional unit of a commodity.

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

Q4. How is Total Utility derived by summing up of marginal utilities.

Ans. Total utility is derived by summing up of Marginal Utilities.

Q5. What is utility?

Ans. Utility means the satisfying capacity of a commodity.

Q6. What is Indifference set?

Ans. It is a set of combinations of two commodities which offer a consumer the same level of satisfaction, so that he is indifferent between these combinations.

Q7. What is meant by Budget Line?

Ans. It is a line showing different possible combinations of good 1 and good 2, which a consumer can buy, within the given income at the price of good 1 and good 2.

Q8. What is meant by Indifference Curve?

Ans. An indifference curve is a curve which represents all those combinations of two goods that give equal satisfaction to the consumer.

Q9. What is meant by marginal rate of substitution?

Ans. Marginal rate of substitution is the rate which the consumer is willing to give up good 1 to get an additional unit of good 2 and be indifferent.

Q10. What are the assumptions of indifference curve?

Ans. Following are the assumptions:-

- (i) The consumer behaves rationally to obtain maximum satisfaction from his expenditure.
- (ii) The consumer is able to arrange available combination of goods as according to his preference.
- (iii) It is based on law of diminishing marginal utility.

Q.11. Write down the Properties of Indifference Curve?

Ans. Following are the Properties.

- (i) An indifference curve always slope downward from left to right.
- (ii) Higher indifference curves notes higher level of satisfaction.
- (iii) Indifference curves are convex to the origin.
- (iv) Indifference curves cannot meet or intersect.

Q 12. Explain Consumer's Equilibrium in case of single commodity with the help of a utility schedule.

Ans. Consumer's Equilibrium means a situation when a consumer buys that much quantity of a commodity which gives him maximum satisfaction. How much quantity of a commodity he should buy is explained with the help of a marginal utility schedule.

Units consumed (A)	MU (A)	TU (A)
1	14	14
2	12	26
3	10	36
4	8	44

Condition: $-P_x MU_x = -P_y MU_y$

Suppose the price of A is Rs 5/.per-unit

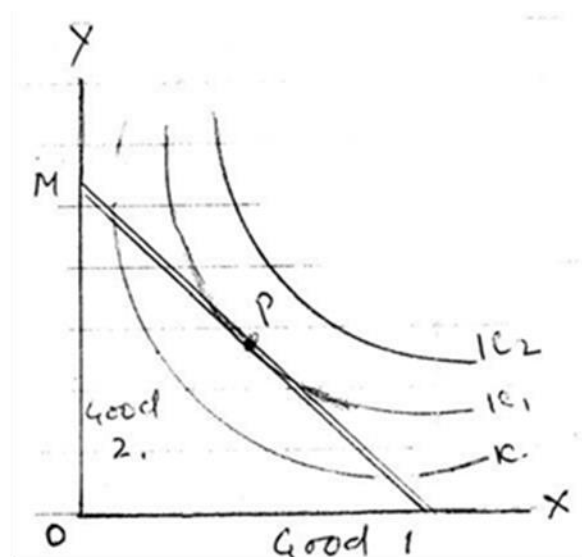
Marginal Utility of Rs 1. = 2

Then for each unit of A he has to sacrifice 10 utility. He will compare the MU of each unit of A with the utility he sacrifices. He will go on buying till the marginal utility of A is equal to the utility that he sacrifices. From the table it is clear, that he will buy three units because at third unit, what he pays is just equal to what he gets. So the consumer is in equilibrium.

condition of equilibrium = MU of good = price of good

Q.13 Explain Consumer's Equilibrium with the help of indifference curve.

Ans. A consumer is said to be in equilibrium when he gets maximum satisfaction, or at the combination at which budget line touches one of the indifference curves would be the equilibrium point.



In given figure P is the equilibrium point at which budget line M touches the highest attainable indifference curve IC₁, within consumer budget. Bundles on IC₂ are not affordable within budget whereas bundles on IC are certainly inferior to those on IC₁. Hence optimum bundle is located at point P where budget line is tangent to the indifference curve IC₁.

Q.14 Explain the relationship between TU & MU.

Ans(i) Total Utility increases as long as marginal utility is more than zero.

(ii) Total Utility is maximum when marginal utility is zero.

(iii) Total Utility starts declining when marginal utility becomes negative.

Q.15 Explain the law of diminishing marginal utility.

Ans. **Law of Diminishing Marginal Utility**

The law states that as more and more units of a commodity are consumed; marginal utility derived from each successive unit goes on falling. Example: A hungry man wants to eat chapatti. The first chapatti which he eats will give him maximum utility say 10 units because it saves him from hunger. Second chapatti will also fetch him utility but not as much as the first one because part of his hunger is satisfied by eating the first chapatti, say 8 units. For the same reason let utility from the third chapatti be 5 units and at last it may be negative. In short as more and more chapattis are consumed, marginal utility from them goes on diminishing because intensity of wants for the chapatti decline.

Units	Mu	Tu
1	10	10
2	8	18
3	5	23
4	2	25
5	1	26
6	0	26
7	-3	23

Above diagram shows that more and more unit start consumed MU declines.

