

ITL PUBLIC SCHOOL
CLASS XI
ECONOMICS

Q1) Define Demand.

Ans) It is the quantity of the good that a consumer is able and willing to buy at different prices within a given period of time.

Q2) What is quantity demanded?

Ans) It refers to the quantities of commodity that consumers are able and willing to buy at specific or particular price within a given period of time.

Q3) What is demand function?

Ans) It shows functional relationship between demand and various determinants of demand (factors affecting demand)

$$D_x = (P_x, P_y, Y, T, F.E)$$

P_x - Price of the good

P_y – Price of related goods

Y – Income of the consumer

T - Taste and preferences

$F.E$ – Future expected price

Q4) What is demand schedule?

Ans) Tabular presentation of demand and various price level is called demand schedule.

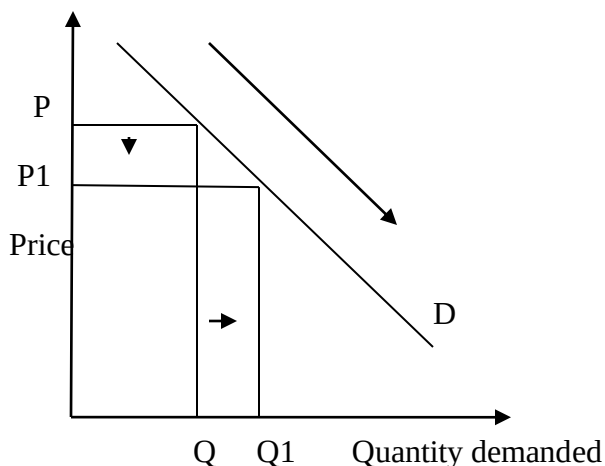
Price	Q.D
10	8
11	6
12	4
13	2
14	1

Q5) What is demand curve?

Ans) Graphical presentation of the relationship between price of the good and quantity demanded

Q6) How price (P_x) and demand of the commodity related? (D_x & P_x)

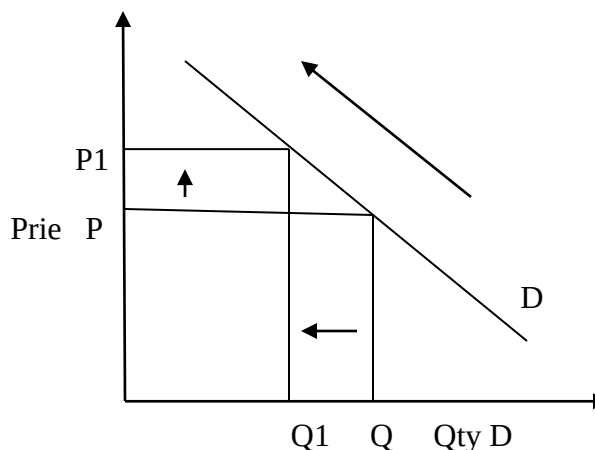
Ans) Price increases, its quantity demanded decreases and if price decreases its quantity demanded increases. This is called law of demand. Price and Q.D are inversely related. If price increases quantity demanded decreases and vice versa keeping other factors. Like taste and preferences, income etc. constant. This law explains the movement along the Demand curve.



P	Q.D
4	10
3	20

This is known as Expansion

Downward movement along the demand curve



P	Q.D
4	10
5	8

This is known as Contraction

Upward movement along the curve

Q7) Why demand curve slopes downward or why demand curve has negative slope or why people buy more at less price. Why people buy less at more at high price.

- Law of Diminishing marginal utility:** This law states that with consumption of additional units of a commodity, MU derived from successive units goes on diminishing. Since additional units of a good give less utility (satisfaction) more will be demanded only at a lower price. This implies demand curve is downward sloping. A consumer will consume a commodity till the point where $MU_x = P_x$. MU curve is also the demand curve.
- Income effect:** Any change in the price of commodity affects the purchasing power or real income of the consumer. Although his money income remains unchanged. With a fall in price of a good, consumer's real income/purchasing power increases and he demand more units of the good. Thus when the price falls, demand rises.
- Substitution effect:** Substitution effect means when the price of the commodity falls, it becomes relatively cheaper in comparison to its substitute. This will lead to more demand for the good. For example, with the rise in price of coffee its substitute tea will become cheaper in relation to coffee. So

people will demand more tea and less of coffee. This explains why a commodity is demanded when its price goes up.

4. **New consumer creating demand:** As price of commodity falls, new consumer class appears who can now afford the commodity. Thus the total demand of commodity increases i.e. with fall in price quantity demanded rises.

How the following factors affect the demand of the product?

- a) Price of related goods.
- b) Income of the consumer.
- c) Taste and preferences.
- d) Future expected price.

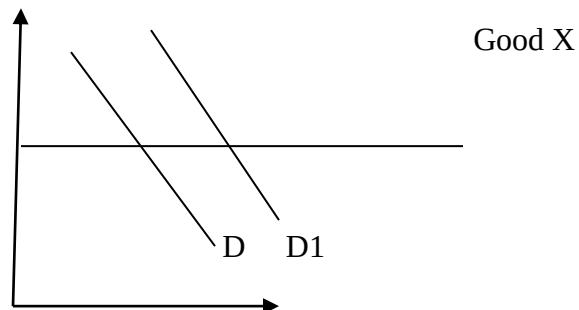
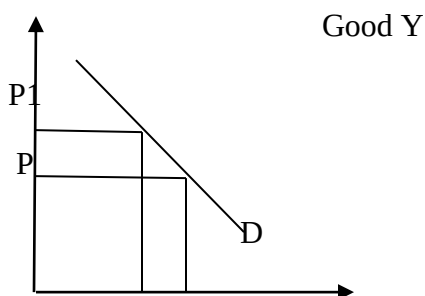
A) **Price of related goods:** Relationship between demand for a good (D_x) and price of related goods (P_y) is known as cross price effect. It is studied with reference to two types of goods.

Substitute goods: These are those goods which can be replaced with each other as these goods can satisfy demand with equal ease.

Example: Tea & Coffee, CNG & Petrol, Pepsi & Coke.

Cross price effect is positive as rise in price of tea, it will shift the consumer to coffee and hence demand for coffee will increase and vice versa.

We can say good X (Coffee) is substitute of good(Y) i.e. Tea and if increase in price of good Y (Tea), the demand for good X (Coffee) increases.



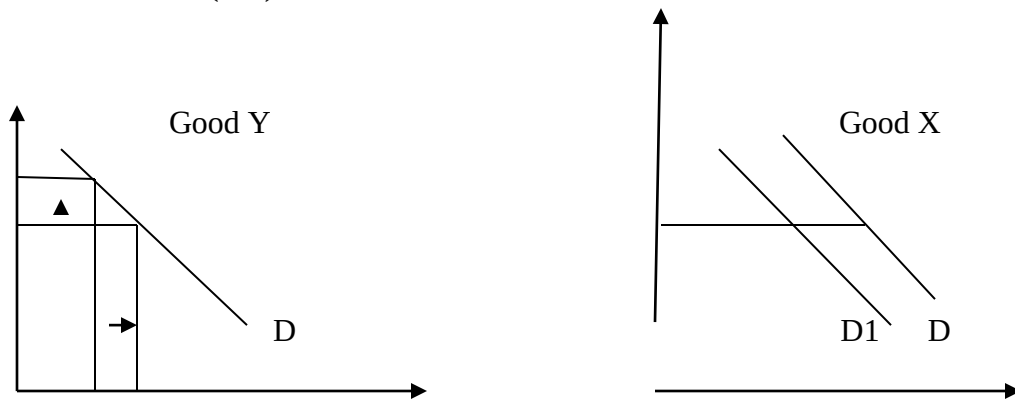
Demand curve of coffee shifts rightwards i.e. increases due to increase in price of tea while price of coffee remains constant.

Complementary goods: These are those goods which are demanded jointly and thus cannot be replaced with each other.

Example: Tea and sugar, Car and fuel, Pen and ink.

Cross price is negative as price of fuel increases it would decrease the demand for fuel and hence demand for car will also decrease and vice versa.

We can say Good X(Car) is a complement of good Y(fuel) and increase in price of Good Y(fuel) will decrease the demand for Good X(Car)



Demand curve for car shift leftwards i.e. decrease with the increase in price of fuel while price of car remains constant.

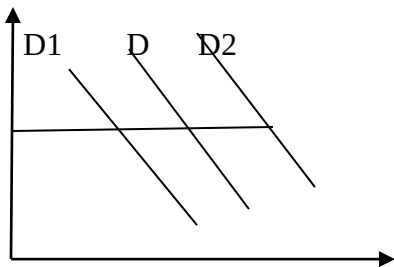
b) Income of the consumer and demand:

How a change in income will affect the demand for a good depends upon the type of good.

Normal goods: These are those goods which have positive income effect. In other words with increase in income demand for the goods increases.

Example: More income means more pen, more shirts etc.

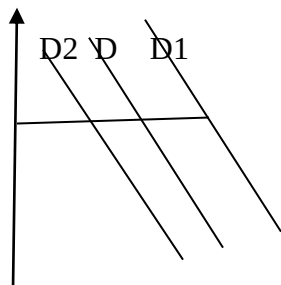
If Y increases Dx Increases, Y decreases Dx decreases (Price remain constant)



Inferior Goods: These are those goods which have negative income effect. In other words with increase in income demand for goods decrease.

Example: Coarse cereals, toned milk etc. with increase in income, family would prefer to shift its consumption from inferior to superior goods, hence demand for superior goods increase that of inferior goods decrease.

If Y increases Dx decreases, Y decreases Dx increases(price constant)



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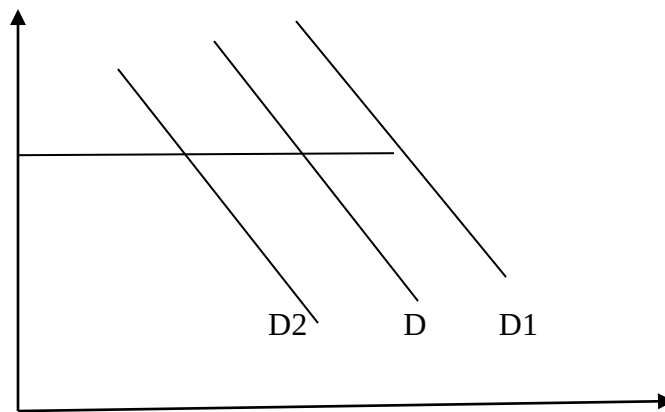
Necessary goods: These are those goods which are income inelastic. i.e. with increase or decrease in income demand remains constant. Example: Salt, sugar etc. Y increase/decrease Dx constant.

Taste and preferences: Any change in consumers tastes causes demand to change. If taste are favorable then demand for a commodity increase. It could be due to personal liking for the product, due to climate conditions like demand for woollens in winters and due to change in trends and fashion like decrease in demand for nylon and increase in demand for denims.

Favorable changes cause rightward shift of the demand curve at existing price.

Unfavorable tastes and changes are due to personal disliking, climatic conditions like, demand for AC in winters and change in trend and fashion like decrease in demand for nylon clothes.

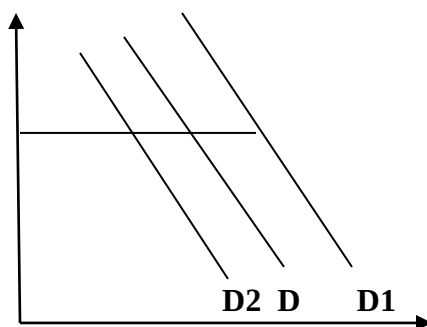
Unfavorable changes causes leftward shift of the demand curve at existing price.



D) Future expected price and demand(F.E & Dx)

a) If the expectation is that the future price will rise, the consumer will increase the current demand as he may prefer to store the commodity at existing price and thus demand curve will shift rightward. Demand curve will shift rightward.

b) If the expectation is that the future price will fall consumer will prefer to postpone its demand and hence demand curve will shift leftward at existing price. Demand curve will shift leftward.



Q9) What is market demand? How it is derived from individual demand?

Ans) 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 the consumers of a commodity in the market at different prices per time period.

Market demand curve is a graphical representation of quantities demanded by all the consumers of a particular commodity in the market.

Suppose there are two buyers A & B in the market and their respective demand schedule.

Price (per kg)	Q.D (A)	Q.D (B)	Q.D (C)	Market demand (A+B+C)
5	100	125	110	335
4	120	150	160	430
3	150	175	180	505
2	170	200	210	580
1	200	225	230	655

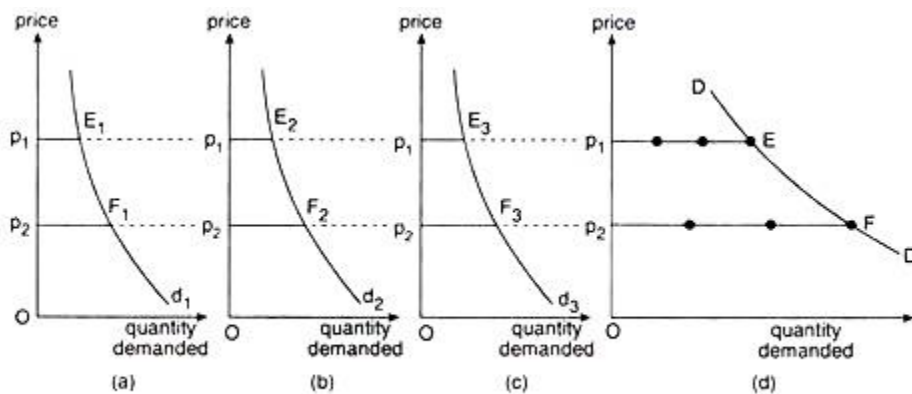


Fig. 1.4 Derivation of market demand curve from individual demand curves

Factors affecting market demand

1. Price of the good.
2. Price of the related goods.
3. Income of the consumer.
4. Future expected price.
5. Taste and preferences of the consumer.

6. **Number of consumer/population size:** Increase in population size increase the demand for good and services and vice a versa. More population means more demand for different commodities.

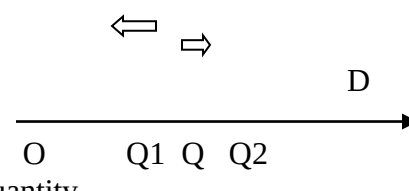
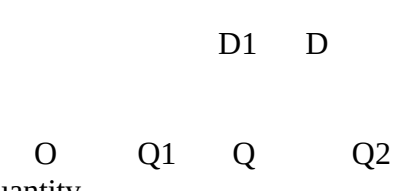
7. **Distribution of income:** Equal distribution of income means demand for goods will come from every segment of the country. Hence overall market demand rise and cause demand curve shift rightward.

Unequal distribution of income means demand will come only from rich class and that too of luxurious items and hence market demand will decrease as large section of society consist of low income group and this will cause demand curve to shift leftward.

8. **Age and Sex composition of the population:** It refers to proportionate of male, female, old age and children in the total population. If population of old ages increases then the demand for stick, medicines increases and if population of children increases then demand for toys will shift rightward or increase.

Q.10. Differentiate between Change in quantity demanded and change in demand.

Basis	Change in Quantity Demanded	Change in Demand																																
Meaning	When price of the commodity changes when other factors are held constant, the resulting change is known as change in quantity demanded. It is also known as movement along the demand curve.	If price is held constant, and any of the determinants of the demand changes, the resulting change is known as change in demand. It is known as shift in the demand curve.																																
Classification	It is classified into two parts expansion and contraction.	It is classified into two parts increase in demand and decrease in demand.																																
Causes	An expansion in demand occurs when the quantity demanded of a commodity rise due to a fall in the price of the commodity, ceteris paribus. A contraction in demand occurs when the quantity demanded of a commodity falls due	An increase in demand takes place when consumers demand more of a commodity not due to change in price but due to favourable change in any of the other determinants of demand. A decrease in demand takes place when consumers demand less of a commodity, not due to change in the price but due to unfavourable change in other determinants of demand.																																
Schedule	<table><thead><tr><th colspan="2">Expansion</th><th colspan="2">Contraction</th></tr><tr><th>P</th><th>Q.D</th><th>P</th><th>Q.D</th></tr></thead><tbody><tr><td>4</td><td>10</td><td>4</td><td>10</td></tr><tr><td>3</td><td>20</td><td>5</td><td>5</td></tr></tbody></table>	Expansion		Contraction		P	Q.D	P	Q.D	4	10	4	10	3	20	5	5	<table><thead><tr><th colspan="2">Increase</th><th colspan="2">Decrease</th></tr><tr><th>P</th><th>Q.D</th><th>P</th><th>Q.D</th></tr></thead><tbody><tr><td>4</td><td>10</td><td>4</td><td>10</td></tr><tr><td>4</td><td>20</td><td>4</td><td>5</td></tr></tbody></table>	Increase		Decrease		P	Q.D	P	Q.D	4	10	4	10	4	20	4	5
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Diagram																																		

	P2  Quantity O Q1 Q Q2 With a fall in price from OP to OP2, quantity demanded increase from OQ to OQ2. This is shown by downward movement along the demand curve and known as Expansion With a rise in price from OP to OP1, quantity demanded decreases from OQ to OQ1. This is shown by upward movement along the demand curve and is known as contraction.	P  Quantity O Q1 Q Q2 D1 D D2 When demand increases from OQ to OQ2 at same price OP due to favourable taste and preferences, increase in income in case of normal goods, increase in price of substitute goods etc is known as increase in demand and is shown by rightward shift of the demand curve. When demand increases from OQ to OQ2 at same price OP due to favourable taste and preferences, increase in income in case of normal goods, increase in price of substitute goods etc is known as increase in demand and is shown by rightward shift of the demand curve.
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