

Theory of Demand

Playstation | Gaming Laptop

Business - Cost - 30,000 → Family Income

Desire	Aman	Kanika	Aparna	Vanika	Bhavya	Demand
Desire	✓	✗	✗	✓	✓	3 units
+ Buying cap. / Purchasing Power	✓	✓	✓	✓	✗	2 units
+ Willing to pay	✗	✓	✓	✗	✗	0 units
						<u>Demand = 0</u>

Effective Demand = Desire (Want) + Purchasing Power + Willingness to pay

→ How Demand is expressed?

- CCW a) Always expressed at a given price.

₹ 10 Qty. 100 units
₹ 15 80 units

b) Quantity Demanded is a Flow concept

Stock
Balance Sheet
as on...
↓
Particular point of time

Flow
Profit & Loss
for the year
↓
Period of time

as on...
 ↓
 Particular point
 of time

↓ for the year
 Period of time

Ex- 100 unit per day, per week, per month, per year.

→ At ₹20,000, Quantity Demanded is 10 units per Month.
 ↓
 At given price
 ↓
 period of time.

* What Determines Demand.

Factors affecting Demand.

1. Price of the commodity -
 (Other factors remaining constant)

$P_x \uparrow \quad Q_x \downarrow$

$P_x \downarrow \quad \text{Quantity Demand} \uparrow$

Inverse | Indirect Relation.

2. Price of Related Commodities

Substitute

Complementary

Competitive

Tea

Coffee

Badminton Racket

Shuttle

No change Price

$P_c \downarrow$

Price - ₹2200

₹900

$Q_x \downarrow$

No change in Price

₹1100 $P \uparrow$

→ Jio

Airtel

$Q_x \downarrow$

P_x - 555

570

Car

Petrol

No change

520

No change in Price

₹70/- litre

$Q_x \downarrow$

→ Q_x of the commodity & price of

→ Q_x of the commodity & price of sub. goods goods
Direct Relation

$P_s \uparrow \quad Q_x \uparrow$
 $P_s \downarrow \quad Q_x \downarrow$

No change in Price

$Q_x \downarrow$

£70/- litre
 ↓
 £100/- litre

$P_c \uparrow \quad Q_x \downarrow$
 $P_c \downarrow \quad Q_x \uparrow$

Inverse

3. Disposable Income of the consumer.

Income remaining after all taxes

In General, Income \uparrow $Q_x \uparrow$

Normal
 Income \uparrow Demand \uparrow
Direct

Inferior
 T-shirt - £90
 Income \uparrow Demand \downarrow
Inverse | Indirect

Essential ^{Necessary}
 Salt, Sugar, Medicines
 ∴ Δ in Income
 ∴ Δ in QD

4. Tastes & Preferences

Favourable \uparrow Demand \uparrow

Unfavourable \downarrow Demand \downarrow

→ External effect

1] Demonstration effect:

- James Duesenberry
- Copy consumption behaviour - Jealousy
- If you can buy, I can buy too. _{↳ Purchasing Power}

2] Bandwagon effect: → [FOMO]

→ Demand is increased because others are also consuming the same commodity.

- Demand is increased because others are also consuming the same commodity.
- Demand ↑ because people wish to be a part of a group.

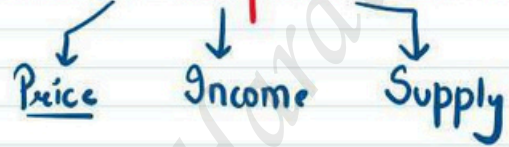
3) Snob effect :-

- Desire to be exclusive ✓
- Demand ↓, because other people are consuming same comm.
- Disassociate themselves from 'common herd'

4) Veblen effect → Thorstein Veblen ✓

- Public display of wealth & social status
- Conspicuous Consumption
- Demand ↑ ^{Show-off}

5) Customer Expectation *



- 1) Price In future.
- ↑ Price - Current Demand ↑
 - ↓ Price - Current Demand ↓

- 2) Income Future.
- ↑ Income - Current Demand ↑
 - ↓ Income - Current Demand ↓

- 3) Supply Future.
- ↓ Supply - Current Demand ↑
 - ↑ Supply - Current Demand ↓

↑ Supply - Current Demand
 ↑ Supply - Current Demand ↓
 ↓
 Mango

6) Size of Population.

↑ Population ↑ Demand

- Age Distribution of population

↑ older age group - Medicines ↑
 - Walking stick ↑
 - Spectacles ↑
 - Health care ↑

↑ children - Toys ↑
 Chocolates ↑
 Stationery ↑

7) Level of National Income & Distribution.

↑ National Income ↑ Normal Goods
 ↓
 Uneven Distribution - few Rich people
 Majority poor people.

→ Propensity to consume of the Rich people will be less.

22 - 2. Govt school - Private school
 Income: 20,000
 - 50,000

↓ Demand for Luxury Goods ↑
Consumer goods ↓

→ Even Distribution - Income ↑ Normal Goods ↑

8) Consumer Credit facility & Int rates

Credit facility Easily Available ↑ Demand ↑

Int Rates ↓ Demand ↑

9) Govt Policy & Regulation.

↓ Taxation. Subsidies

Taxes ↑ Price ↑ Demand ↓
 Income ↓

Subsidies ↓ Price ↓ Demand ↑

Taxation. Subsidies

Income ↓ -

Chinese
Import duty ↑ - Price ↑ Demand ↓
(Tax)

Subsidy ↓ Price ↑ Demand ↓

x — x

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MCQs

04 July 2023

21:48



4th July

CA Hardik Manchanda

Multiple Choice Questions

1) In economics, demand is a

- a) Flow concept
- b) Stock concept
- c) Wealth concept
- d) None of the above

2) How are Apples and Oranges related when as result of rise in prices of Apples, demand of orange increases?

- a) substitute goods
- b) Complementary goods
- c) Normal goods
- d) Inferior goods

A P ↑ O D ↑
Sub.

Multiple Choice Questions

3) 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

4) If the income of the people rises, demand for the inferior goods will

- a) Increase
- b) Decrease
- c) Remain constant
- d) None of the above

Multiple Choice Questions

- ✗ 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

6) As the consumer's income increases, the demand for ^{Essentials} necessities of life will increase _____ to the increase in income

- a) Less than proportionate
- b) More than proportionate
- c) Proportionate
- d) None of these

Change in Demand < change in Inc.

Multiple Choice Questions

7) In case the consumer expects a steep rise in price of Potatoes in future, his current demand for it will:

- a) Remain same
- b) Fall
- c) Rise
- d) None of these

8) The tendency of people to imitate the consumption pattern of other people is known as

- a) Demonstration -
- b) Bandwagon -
- c) Prestige
- d) Veblen

Multiple Choice Questions

9) When the quantity of a commodity ~~than~~ ^{that} an individual buyer demand falls in response to the growth of purchases by other buyers, such an effect

- a) Bandwagon
- b) Snob
- c) Veblen
- d) Demonstration

10) Some buyer's demand more of a certain commodities at a higher price, such an effect is called

- a) Bandwagon
- b) Snob
- c) Demonstration
- d) Veblen

x ——— x

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i) Demand function:

Relationship b/w Independent & Dependent variable

$$x = y + 5 \quad \text{where } x = f(y)$$

Dependent variable value

Demand function:

$$Q_x = f [\overset{\text{Income}}{P_x}, Y_c, \overset{\text{Income}}{P_R}]$$

Demand Dependent Independent

→ Relationship b/w Quantity demanded for a product & is determinants (Factors affecting demand)

→ Law of Demand

↳ Prof. Alfred Marshall

" Amount demanded increases with a fall in price & diminishes with rise in price "

कम होता

↑ Price ↓ Demand
↓ Price ↑ Demand

- Inverse relationship b/w price & Quantity demanded.

Ceteris paribus.
Other factors constant

→ Demand Schedule

↳ Table showing quantities of a good that buyers would choose to purchase at diff. prices, per unit of time, *ceteris paribus*.

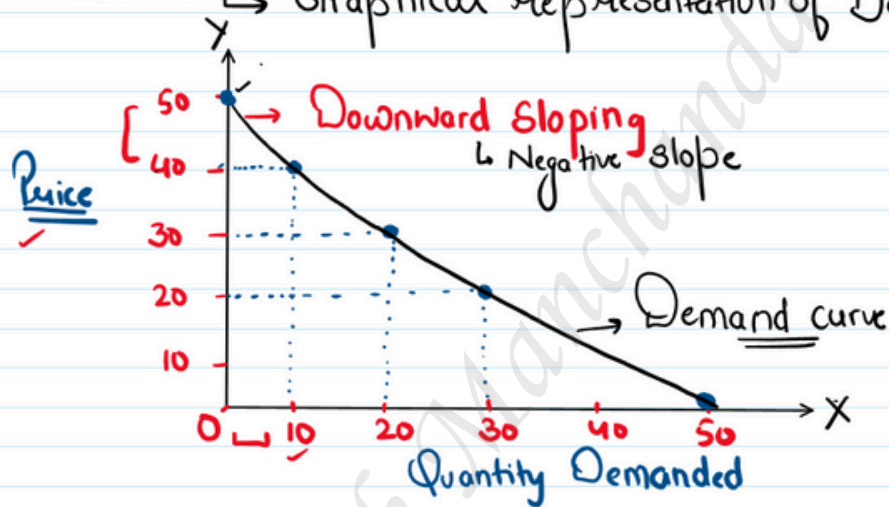
- Individual Demand Schedule

	Price of chocolate	Quantity Demand
--	--------------------	-----------------

	Price of chocolate ₹	Quantity Demand (per week) ✓
Market	50	0
	40	10
	30	20
	20	30
	0	50

→ Demand Curve

↳ Graphical representation of Demand Schedule.



→ Slope = $\frac{\Delta Y}{\Delta X} = \frac{-10}{10} = -1$ Negative

= $\frac{\Delta Y}{\Delta X} = \frac{\Delta \text{Price}}{\Delta \text{Demand}}$

↳ Inverse relation blw Price & Demand

* Market Demand:

↳ Quantity Demanded by all the buyers in the Market.

✓ * Rationale of Law of Demand:

↳ Why law of Demand works?

1) Substitution effect
Product

1) SUBSTITUTION effect

	Product	Tea	Coffee
Price		10	10
Demand		20	15
Price ↓		8	
Demand		↑	↑↑↑

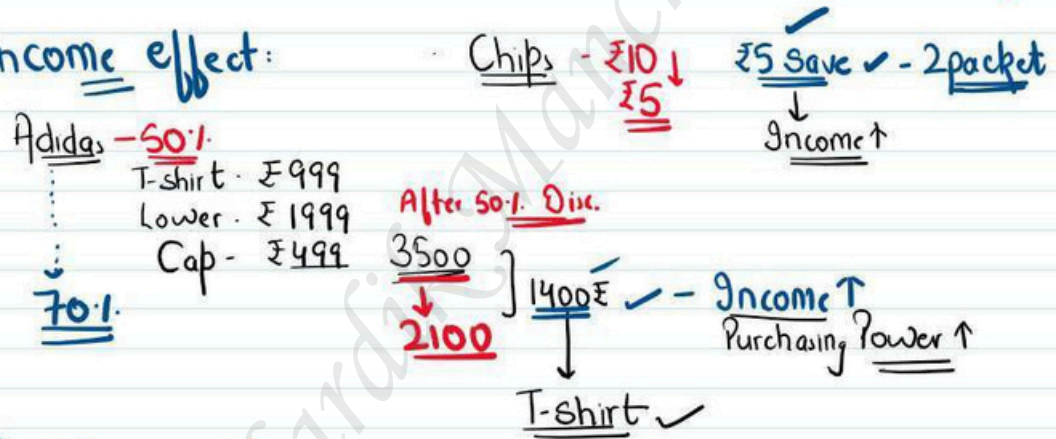
Favourable

a) Price falls ↓, Substitution effect is +ive, it will cause demand to increase.

b) The Substitution effect will be stronger when:

- (i) Goods are closer substitute.
- (ii) Lower cost of switching to substitute goods.
- (iii) Lower inconvenience while switching.

2) Income effect:



→ Fall in the price of comm. → ↑ in Real Income
↑ Purchasing Power
↓ More Demand

3) Utility Max behaviour of customer:

↓ Satisfaction

- Buy 1 - MRP → T-shirt - ₹1000
- Buy 2 - 30% off. T-shirt - ₹700

→ Customer has diminishing utility for each additional unit of a commodity &

→ Customer has diminishing utility for each additional unit of a commodity & willing to pay less for each add. unit.

4) Arrival of new customers -

Budget
₹50,000

Current Price
₹60,000

Sale: 15 & 16 July

P↓ - Arrival of new customers
Demand↑

₹50,000 ✓
Ready to buy

5) Different Uses:

2010-12

↳ Milk - 20l. litre

2l

↓
Chai

P↓ - More no. of uses - Demand↑

Milk ↓ 18l. litre

P↑ - Limited uses Demand↓

3l

Chai Rheeer

x ——— x

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→ Exceptions to Law of Demand:

1. Conspicuous Goods: → Founded by Veblen

a) Articles of prestige value / high prices are used by rich people as status symbols.

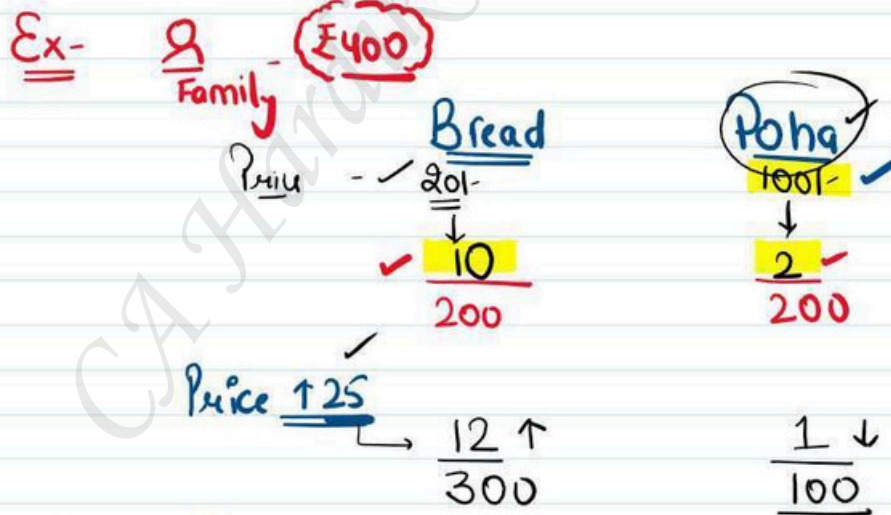
b) These goods are purch. only if their prices are high.

c) Ex- Diamond

2. Giffen Goods: - a) Inferior with no close substitute.

↓
Sir Robert Giffen

b) Occupy a substantial place in consumer budget



P ↑. Demand ↑ - Law of Demand X

- Bread: even when its price increased, it was still the cheapest food article, people consumed more of it.

3) Conspicuous Necessities:

3) Conspicuous Necessities:

- Demonstration / Band wagon
- Even though some goods are not necessary, they become necessity of life.

Price ↑
Demand ↑

Ex- TV, washing Machine

* 4) Future expectation about price

→ Prices are rising & it is expected that price will even be higher in future, Demand ↑

5) Incomplete Info. & Irrational Behaviour.

- Law of Demand assumes consumers to be rational.
- However, customers may demand larger quantities even at higher prices because of incomplete info.
- Sometimes, consumers make impulsive purchases without thinking about prices.

6) Demand for necessities: - Irrespective of price change, demand for necessities will not change.
Essential Goods

7) Speculative Goods:

↓
Stocks

Price ↑. Demand ↑
Price ↓ Demand ↓

Tata Motors → Demand ↑
or bhi badega

Zomato → Demand ↓
or Ram

x — x

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→ Demand & Quantity Demanded.

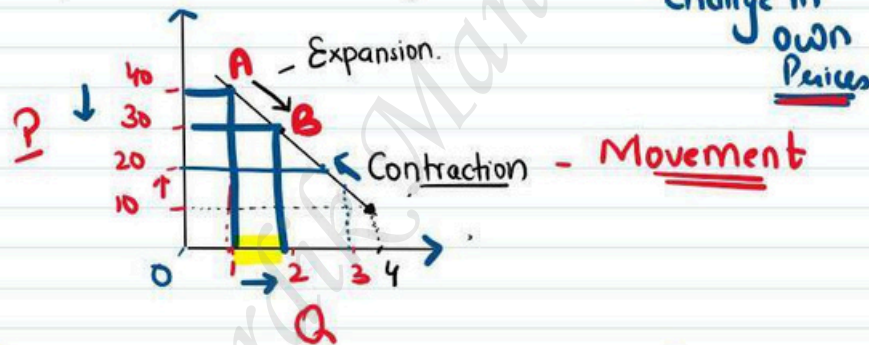
Example:

P	Q	Chocolates
10	2	
8	5	
5	10	

Demand - Represents the entire relationship b/w price & demand, taking into account various other factors.
 Overall desire of customer to purchase at various price

Quantity Demanded - Refers to specific quantity associated with a particular price.

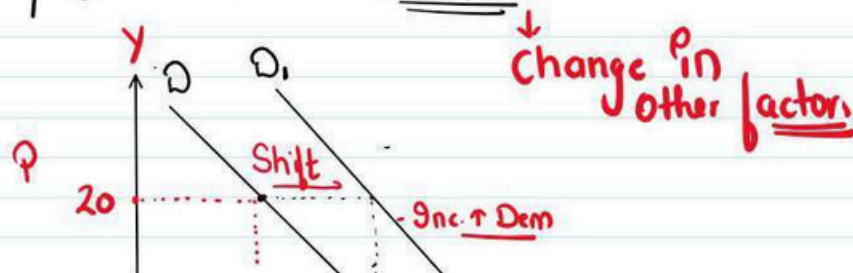
* Expansion / Contraction of Demand.

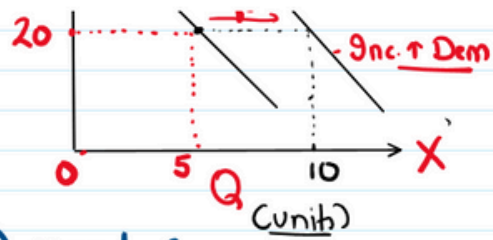


1) Expansion - ↓ own Price ↑ Quantity Demanded
 → Downward Movement on Demand

2) Contraction - ↑ own Price ↓ Q.D.
 → Upward Mov. on Demand curve.

* Increase / Decrease in Demand





→ Shift in Demand curve.

1. Income

↑ in Income - Rightward shift
 - Normal goods
 - Inferior goods - Leftward shift

↓ in Income -
 - Normal Goods - Leftward shift
 - Inferior goods - Rightward shift

2. Substitute Goods

↑ price of sub goods - Rightward shift
 ↓ price of sub goods - Leftward shift

3. Complementary Goods:

↓ in price of comp goods - Rightward shift
 ↑ in price of comp goods - Leftward shift

4. Customer Expectation:

Price ↑ in future - Rightward shift
 Price ↓ in future - Leftward shift

5. Tast & preference

Change in favour of own goods - Rightward shift
 Change not in favour - Leftward shift

Change not in favour - leftward shift

x ———> x

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→ Elasticity of Demand ✓

↓
How much? - Magnitude

Price ↓ 10%. Demand ↑ kitni? ✓ - Elasticity

→ Responsiveness of quantity demand to change in one of the factors affecting demand.

→ Elasticity of demand tells you that how sensitive is the demand for the product to its factors.

→ Example:

	P_x (₹)	D_x - <u>unih</u>
P	200	10
P_1	100	40

$E_d =$

% change in Price = $\frac{P_1 - P}{P} \times 100$ (change in P_{unih})

= $\frac{100 - 200}{200} \times 100$

= $\frac{-100}{200} \times 100 = -50\%$

↓ Decrease

Δ - Delta

$$\rightarrow \% \text{ Change in Q.D} = \frac{40 - 10}{10} \times 100$$

Δ - Delta
Change = 30

$$= \frac{30}{10} \times 100 = +300\%$$

Inc.

$$E_d = \frac{\% \Delta \text{ in Q.D.}}{\% \Delta \text{ in Price}} = \frac{300}{-50} = -6$$

Law of Demand

Price elasticity of Demand
By default

\rightarrow Income of Consumers Demand

£20,000	20	}	change = 20
↑ £30,000	40		

$$E_d \rightarrow \text{Income elasticity of Demand} = \frac{\% \Delta \text{ in Q.D.}}{\% \Delta \text{ in Cons Income}}$$

$$\% \Delta \text{ in Income} = \frac{+10,000}{20,000} \times 100 = 50\%$$

$$\% \Delta \text{ in Q.D.} = \frac{20}{20} \times 100 = 100\%$$

$$E_d = \frac{100}{50} = 2$$

1) Price Elasticity of Demand - % Method

↳ Responsiveness of Q.D. of a goods to change in its price.

$$E_d = \frac{\% \Delta \text{ in Q.D.}}{\% \Delta \text{ in Price}}$$

1 change in its price. \cup

$$\epsilon_p = \frac{\% \Delta \text{ in Q.D.}}{\% \Delta \text{ in Price}} \quad \checkmark$$

$$\% \Delta \text{ in Q.D.} = \frac{Q_1 - Q_0}{Q_0} \times 100$$

$$= \left| \frac{\Delta Q}{Q_0} \times 100 \right|$$

$$\% \Delta \text{ in Price} = \frac{P_1 - P_0}{P_0} \times 100$$

$$= \left| \frac{\Delta P}{P_0} \times 100 \right|$$

$$\epsilon_p = \frac{\Delta Q}{Q_0} \times 100 \div \frac{\Delta P}{P_0} \times 100$$

$$\epsilon_p = \frac{\Delta Q}{Q_0} \times \frac{P_0}{\Delta P} = \frac{\Delta Q}{\Delta P} \times \frac{P_0}{Q_0} \quad \checkmark$$

\Rightarrow Example: Price of a product reduces from 6 to 4 & Q.D increased from 10 to 15

$$\epsilon_p = \frac{5}{-2} \times \frac{6}{10} = -1.5$$

Example: $\% \Delta \text{ in Q.D} = \frac{25}{100}$ $P_0 = 100$ $P_1 = 80$

$$\% \Delta \text{ in Price} = \frac{-20}{100} \times 100 = -20\%$$

$$\epsilon_p = \frac{25}{-20} = -1.25$$

Ex- $\epsilon_p = 1$. At given price customers buy 60 units. How many

Ex- $\epsilon_p = 1$. At given price customers buy 60 units. How many units will customers buy if price falls by 10%.

$$\epsilon_p = \frac{\% \Delta \text{ in Q.D.}}{\% \Delta \text{ in Price}}$$

$$-1 = \frac{\% \Delta \text{ in Q.D.}}{-10}$$

$$\% \Delta \text{ in Q.D.} = 10$$

$$\frac{Q_1 - 60}{60} \times 100 = 10$$

$$Q - 60 = 6 \Rightarrow \underline{Q_1 = 66}$$

Ex- Price of goods decreases from ₹100 to ₹60
 $\epsilon_p = 1.5$ $Q_0 = 30$ $\underline{Q_1 ?}$

$$-1.5 = \frac{\Delta Q}{-40} \times \frac{100}{30}$$

$$18 = \Delta Q$$

$$Q_1 - Q = 18$$

$$Q_1 - 30 = 18$$

$$\underline{Q = 48}$$

Ex- Consumer buys 80 units at price of ₹40.
 $\epsilon_p = -4$. At what price P_1 will he buy 60 units.
 Q_1

$$\epsilon_p = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$-P = \frac{\Delta P}{\Delta Q} \times Q$$

$$-4 = \frac{-20}{\Delta P} \times \frac{4}{8} \Rightarrow +4 = \frac{-8 \cdot 1}{\Delta P \times 8}$$

$$\Delta P = \frac{1}{4} \cdot \underline{0.25}$$

$$P_1 - P = 0.25$$

$$P_1 - 4 = 0.25$$

$$\underline{P_1 = 4.25} \checkmark$$

x = x

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Ex. $P_0 = ₹100$ $Q_0 = 50$
 $P_1 = ₹120$ $Q_1 = 40$

$$E_d = \frac{\Delta Q}{\Delta P} \times \frac{P_0}{Q_0} = \frac{-10}{20} \times \frac{100}{50} = -1$$

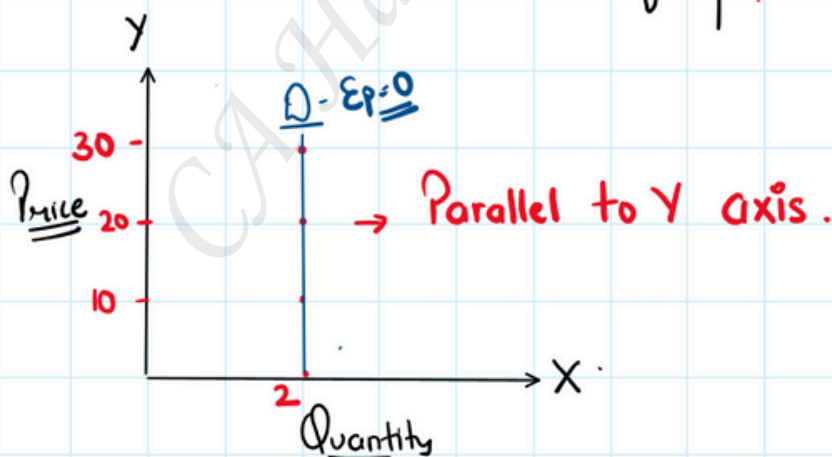
* Interpretation of Numerical value of elasticity.
 Range \downarrow $E_d = \frac{\% \Delta \text{ in Q.D.}}{\% \Delta \text{ in Price}} \rightarrow \frac{0}{n} \rightarrow \frac{n}{0}$

\rightarrow Varies from zero to Infinity = $0 \cdot \infty$

1) $E_p = 0$ - Perfectly Inelastic
 $E_p = \frac{\% \Delta \text{ in Q.D.}}{\% \Delta \text{ in Price}} \rightarrow \frac{0}{n}$

a) When Q.D. does not respond at all to price change

b) Extreme case of price insensitivity.



2) $E_p < 1$ = Inelastic
 $E_p = \% \Delta \text{ in Q.D.}$

2) $\epsilon_p < 1$ - Inelastic

$$\epsilon_p = \frac{\% \Delta \text{ in Q.D.}}{\% \Delta \text{ in Price}}$$

$\Rightarrow \% \Delta \text{ in Price} > \% \Delta \text{ in Q.D.}$

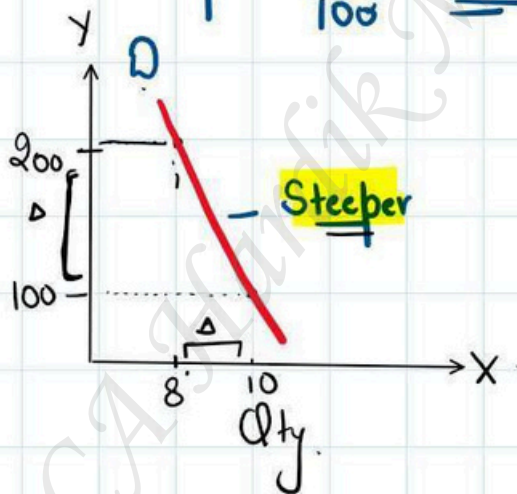
* Q.D is relatively insensitive to price changes.

	Q	P
Origin.	10	100
Change	8	200

$$\% \Delta \text{ in Price} = 100 \cdot \left[\frac{100}{100} \times 100 \right]$$

$$\% \Delta \text{ in Qty} = 20 \cdot \left[\frac{2}{10} \times 100 \right]$$

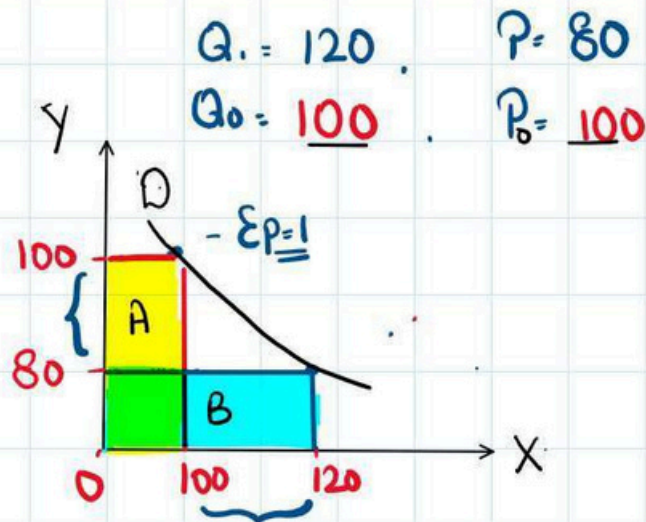
$$\epsilon_p = \frac{20}{100} = \underline{0.2} \text{ - Inelastic}$$



3) $\underline{\epsilon_p} = 1$ - Unitary elastic

$$\epsilon_p = \frac{\% \Delta \text{ in Q.D.}}{\% \Delta \text{ in Price}}$$

$$\% \Delta \text{ in Q.D.} = \% \Delta \text{ in Price}$$



→ Demand curve is rectangular hyperbola.
Area same

4) $\epsilon_p > 1$ - Elastic

$\cdot \Delta \text{in } Q.D > \cdot \Delta \text{ in Price}$

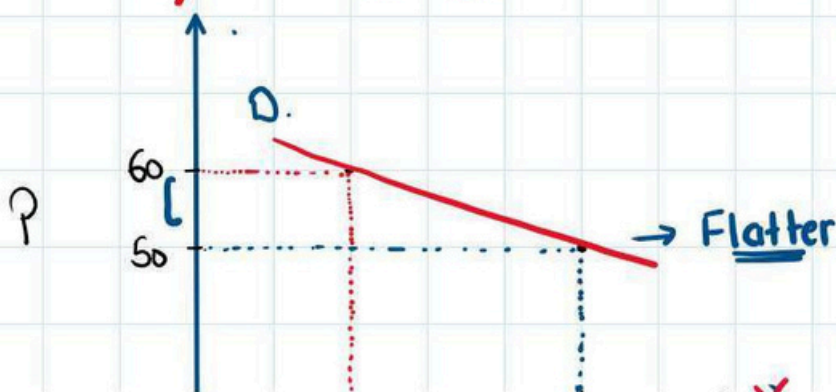
→ QD is relatively Sensitive to price changes.

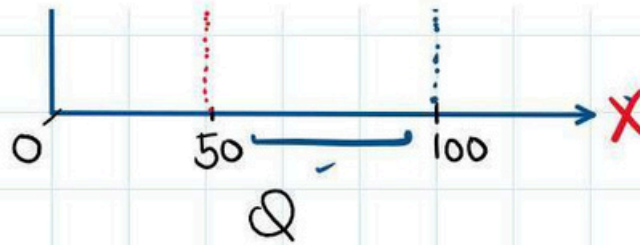
ϵ_x

$Q_0 = 100$ $P_0 = 50$

$Q_1 = 50$ $P_1 = 60$

$\epsilon_p = \frac{50}{10} \times \frac{50}{100} = \underline{\underline{2.5}} > 1$



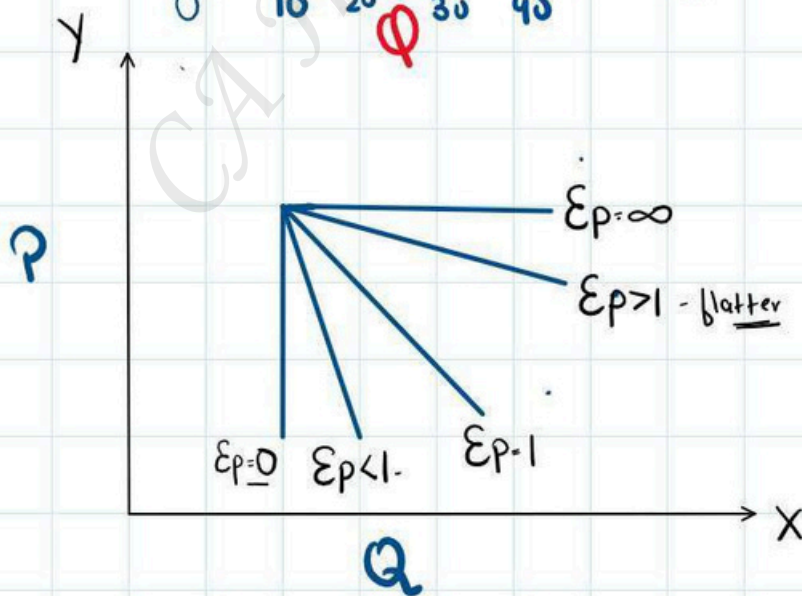
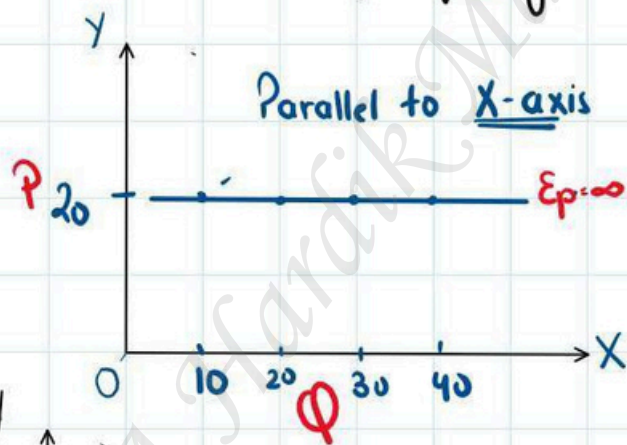


5) $\epsilon_p = \infty$ Perfectly elastic

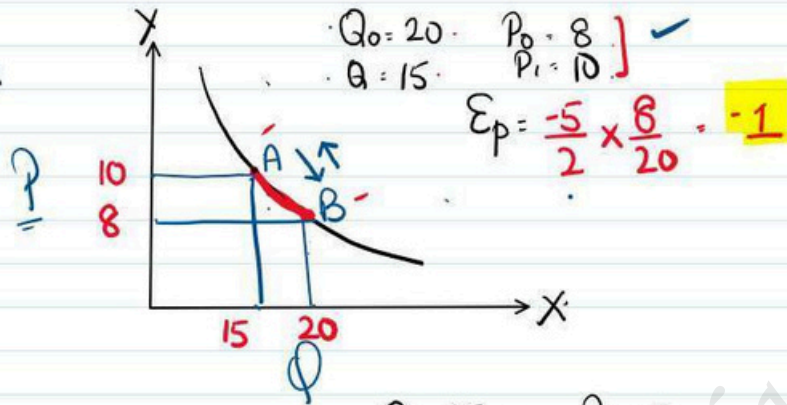
$$\epsilon_p = \frac{\% \Delta \text{ in Q.D.}}{\% \Delta \text{ in Price}} = 0$$

$$\% \Delta \text{ in Price} = 0$$

- Small change in price leads to change in Q.D.
- Found in perfectly competitive Market.



Example:



$Q_0 = 15$ $P_0 = 10$
 $Q_1 = 20$ $P_1 = 8$
 $\epsilon_p = \frac{5}{-2} \times \frac{10}{15} = -1.67$

* ARC Elasticity

↳ To measure elasticity over some portion of demand curve rather than at a single point.

$$\epsilon_p = \frac{\Delta Q}{\Delta P} \times \left[\frac{P_0 + P_1}{Q_0 + Q_1} \right] = \left[\frac{\Delta Q}{\Delta P} \times \frac{P_0 + P_1}{Q_0 + Q_1} \right]$$

$$\epsilon_p = \frac{Q_1 - Q_0}{P_1 - P_0} \times \frac{P_0 + P_1}{Q_0 + Q_1}$$

$$= \left[\frac{Q_1 - Q_0}{Q_0 + Q_1} \times \frac{P_1 + P_0}{P_1 - P_0} \right]$$

ϵ_x

$$\frac{5}{35} \times \frac{18}{2} = \underline{\underline{1.29}}$$

MCG

∴ Method

Suppose the price of movies seen at a theatre rises from Rs. 120 per person to Rs. 200 per person. The theatre manager observes that the rise in price causes attendance at a given movie to fall from 300 persons to 200 persons. What is the price elasticity of demand for movies? (Use Arc elasticity Method)

a) Rs. 0.5

- a) Rs. 0.5
- ~~b) Rs. 0.8~~
- c) Rs. 1
- d) Rs. 1.2

$$\epsilon_p = \frac{100}{500} \times \frac{4}{80}$$

If the local pizzeria raises the price of a medium pizza from Rs. 60 to Rs. 100 and quantity demanded falls from 700 pizza a night to 100 pizza a night, the price elasticity of demand for pizza is: (Use Arc elasticity Method)

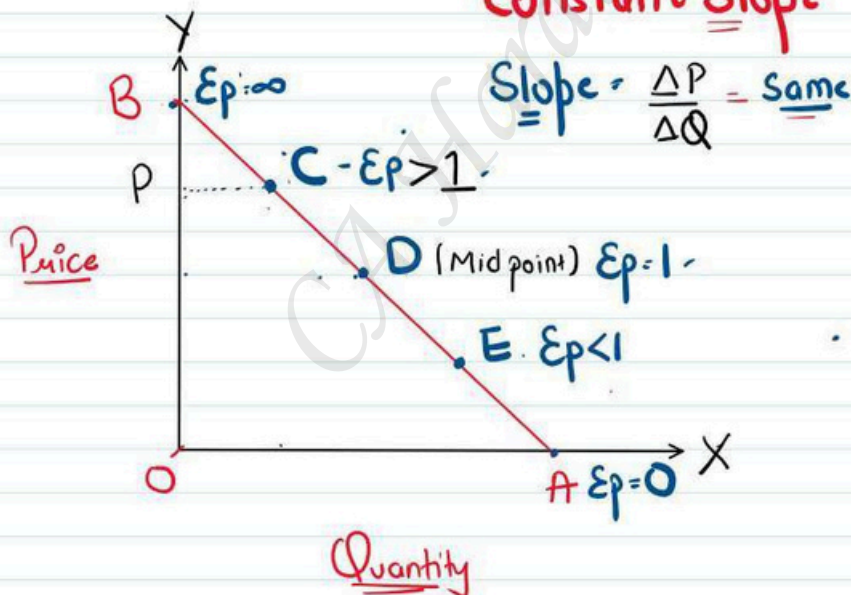
- a) Rs. 0.67
- b) Rs. 1.5
- c) Rs. 2.0
- ~~d) Rs. 3~~

$$\frac{600}{800} \times \frac{40}{40}$$

* Geometric Method

i) Linear Demand Curve ✓

Constant Slope



$$\epsilon_p = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$\epsilon_p = \frac{\text{Lower Segment}}{\text{Upper Segment}}$$

Upper Segment

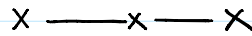
Point B = $\frac{AB}{0} = \infty$

Point C = $\frac{CA}{CB}$, $CA > CB$, $\epsilon_p > 1$

Point D (Mid-point) = $\frac{DA}{DB}$, $DA = DB$, $\epsilon_p = 1$

Point E = $\frac{EA}{EB}$, $EA < EB$, $\epsilon_p < 1$

Point A = $\frac{0}{AB}$, $\epsilon_p = 0$



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* Total Outlay Method / Expenditure Method

- ✓ Expenditure = Price x Quantity
- or
- ✓ Revenue

Example: Chocolate

a)

P	Q	Exp.
50	20	1000
40	25	1000

b)

P	Q	Exp.
20	100	2000
25	80	2000

Change in Price
 ↓
 Exp. remains the same ⇒ $\epsilon_p = 1$
 ↓
 Price effect = Qty eff.

2) a)

P	Q	Exp.
50	100	5000
40	110	4400

Price effect > Qty effect

Price ↓
 Exp. ↓
 Direct Relation
 $\epsilon_p < 1$

b)

P	Q	Exp.
50	100	5000
60	90	5400

P ↑
 Exp ↑
 Direct Relation
 $\epsilon_p < 1$

3) a)

P	Q	Exp.
50	100	5000
40	150	6000

Price ↓
 Exp ↑
 Inverse Relation



\downarrow 50. 100 5000 | $\text{Exp} \uparrow$ relation
 40. 150 6000

P.E. - $100 \times 10 = 1000$

Q.E. - $50 \times 40 = 2000$

$\epsilon_p > 1$

b) \uparrow P Q Exp Price \uparrow
 50 100 5000 Exp \downarrow Inv. relation
 60 80 4800

$\epsilon_p > 1$

Price	Inv. Relation b/w price & Exp \uparrow Elastic	Demand No change in Exp unitary elastic	Direct relation b/w price & Exp \uparrow Inelastic
Increase	Exp - Decrease	Exp - No change	Exp - Inc.
Decrease	Exp - Increase	Exp - No change	Exp - Dec.

MCG

1. $\epsilon_p = 2$ $\% \Delta \text{ in Qty} = -20\%$ Q \downarrow

$P_0 = 10$ ✓

$P_1 = ?$

P \uparrow ✓

$\rightarrow \left[-2 = \frac{\% \Delta \text{ in Qty}}{\% \Delta \text{ in Price}} \right] \Rightarrow \% \Delta \text{ in Price} = \frac{10}{10 + 1} = 11$

$\left[\frac{P_1 - P_0}{P_0} \times 100 = 10 \right]$

$P_1 = 11$

2) \uparrow $P_0 = 100$ $Q_0 = 80$ }
 $P_1 = 120$ $Q = 60$

1. Arc elasticity

$$\epsilon_p = \frac{20}{20} \times \left[\frac{220}{140} \right]$$

$$\epsilon_p = \underline{\underline{1.57}}$$

2. Expenditure
Method

$$\begin{array}{l} \epsilon_p \\ 8000 \\ 7200 \end{array} \downarrow \text{Inverse - Elastic}$$

$\epsilon_p > 1$

* Point Elasticity

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Point Elasticity

17 July 2023 20:25

→ Point Elasticity

Ex- Cars

Selling price - ₹40,00,000
 Price ↓ ₹39,99,000 } ₹1000 ↓

* Used for measuring price elasticity where change in price is **infinitesimal**.
 ↳ very small change.

$$\epsilon_p = -\frac{dq}{dp} \times \frac{p}{q} \rightarrow \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

↓
Derivative of quantity with respect to price

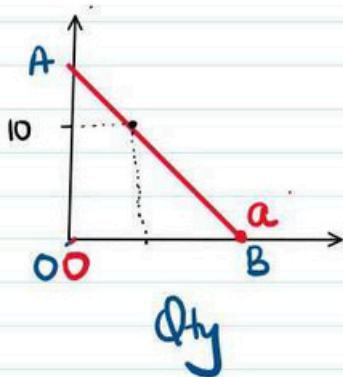
For example:

Demand function:

$$q = a - bP$$

↓
Vertical intercept
↓
quantity demanded when price is zero.

$b = \underline{\text{slope}}$



Qty

price = 0

$$\rightarrow q = 80 - 2p \text{ , at price} = \underline{\underline{10}}$$

$$= 80 - 2 \times 10$$

$$= \underline{\underline{60}} \checkmark$$

$$\rightarrow \epsilon_p = \frac{dq}{dp} \times \frac{p}{q}$$

$$= \frac{d(80-2p)}{dp} \times \frac{10}{60}$$

$$\left(\frac{d(80)}{dp} - \frac{d(2p)}{dp} \right) \times \frac{10}{60}$$

$$[0 - 2] \times \frac{1}{6}$$

$$\epsilon_p = \frac{-2}{6} = \frac{-1}{3} = \underline{\underline{-0.33}}$$

Rules:

1. Derivative of Constant w.r.t price = 0
 $\frac{d(20)}{dp} = 0 \Rightarrow \frac{d(100)}{dp} = 0$

2. Derivative of price w.r.t price = 1
 $\frac{dp}{dp} = 1$

Ex- Determine the price elasticity:

$$q = 1200 - 10P \text{ , price} = \underline{\underline{5}}$$

$$\Rightarrow q = 1200 - 10 \times 5$$

$$= \underline{\underline{1150}}$$

$$\epsilon_p = \frac{dq}{dp} \times \frac{p}{q}$$

$$\textcircled{-10} \leftarrow = \frac{d(1200-10p)}{dp} \times \frac{5}{1150}$$

$$= \left(\frac{d(1200)}{dp} - \frac{d(10p)}{dp} \right) \times \frac{5}{1150}$$

$$= 0 - 10 \frac{dp}{dp}$$

$$= -10 \times \frac{5}{1150} = \underline{\underline{-0.0434}}$$

$$= \frac{-10 \times 5}{1150} = \underline{\underline{-0.0434}}$$

x ——— x

* Determinants of price elasticity of demand.

1) Availability of Substitutes:

- a) Degree of Substitutability
- b) Extent of availability of sub.

→ Close or perfect substitute:

→ highly -elastic. $\epsilon_p > 1$.

As a commodity

Ex- Salt, petrol, Mobile phone

↓
No substitute
↓
Inelastic

As a brand

Diff. Brands are available

→ Brands can have elastic demand.

2) Position of a commodity in the consumer budget.

→ Greater the proportion of income spent on commodity

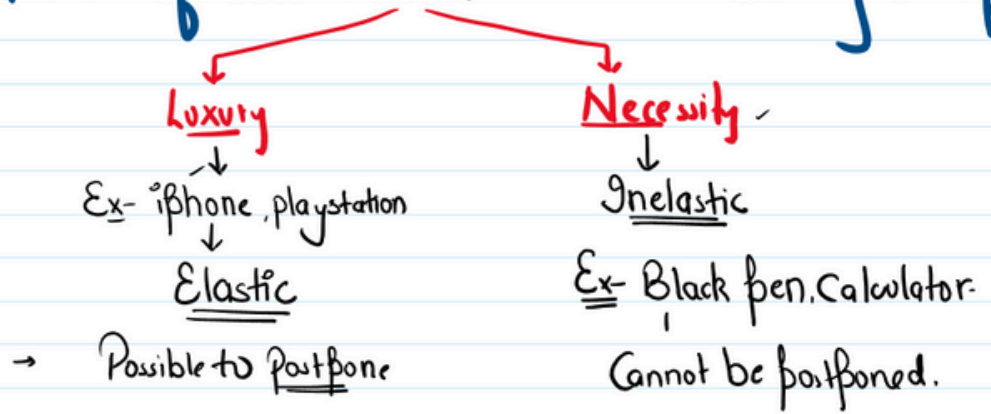
↓
Greater the elasticity & vice versa.

Ex- Salt, matchbox, etc. - highly inelastic

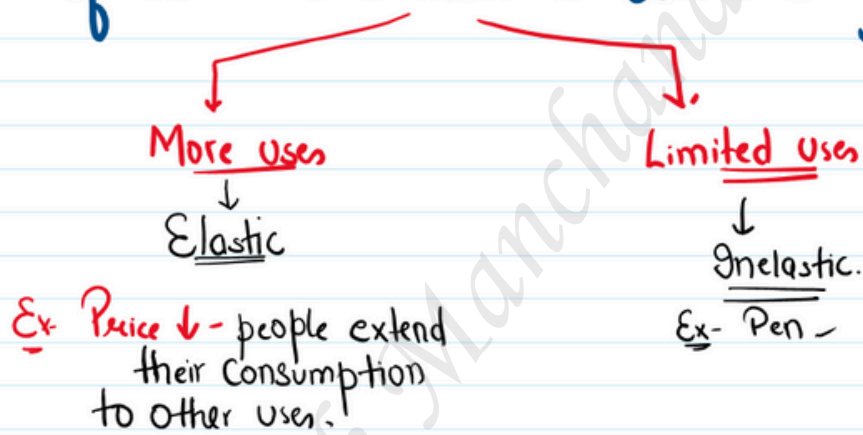
- Admission fees, travelling, food, etc - elastic

3) Nature of the need that commodity satisfies:

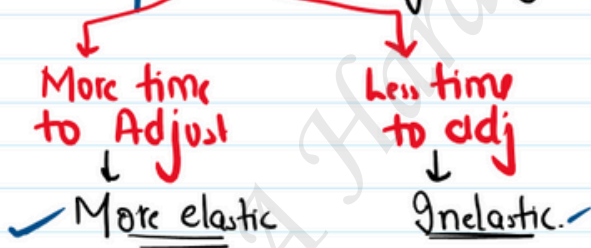
3) Nature of the need that commodity satisfies:



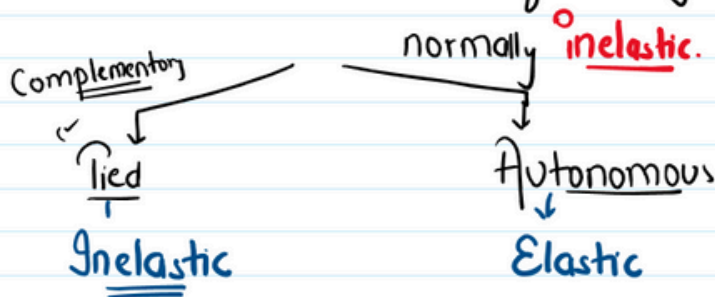
4. No. of uses to which a commodity can be put



5. Time period - times gives buyers an opportunity to find alternative or substitute or change their habits

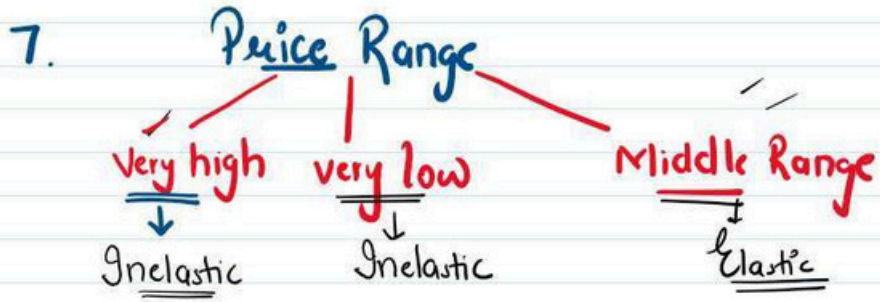


6. Tied Demand: - Demand for those goods which are tied to other goods



Inelastic

Elastic



8. Minor Complementary items:
अस्ती ✓

↳ Cheap Complementary items to be used together with an expensive product
↓
Inelastic.

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INCOME ELASTICITY

↓
Consumer

→ Degree of responsiveness of quantity demanded of a good to change in income of consumer.

$$\begin{aligned} \epsilon_i &= \frac{\% \Delta \text{ in Demand}}{\% \Delta \text{ in Income}} \\ &= \frac{\Delta Q}{\Delta Y} \times \frac{Y}{Q} \end{aligned}$$

Example:

Income	Demand
10,000	20
15,000	40

$$\begin{aligned} \% \Delta \text{ in Demand} &= \frac{Q_1 - Q_0}{Q_0} \times 100 \\ &= \frac{40 - 20}{20} \times 100 = 100\% \end{aligned}$$

$$\% \Delta \text{ in Income} = \frac{5000}{10000} \times 100 = 50\%$$

$$\epsilon_i = \frac{100}{50} = 2$$

Imp
Example

Car type	Price	Qty.
New	650,000	400
old	60,000	4000

Q_1

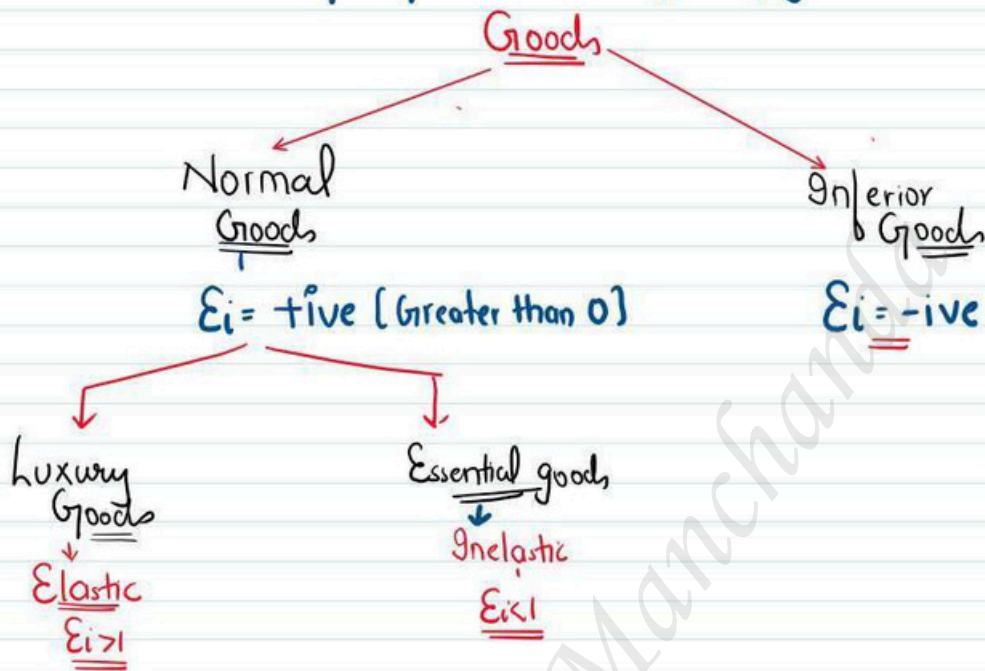
→ Income of consumer increased by 10%.
Sales of new car increased to 500.
Sales of old car decreased to 3850. → Q_1

$$\epsilon_i (\text{New car}) = \frac{25}{10} = +2.5 \rightarrow \text{Normal Goods}$$

$$\epsilon_i (\text{old car}) = \frac{-150}{1000} = -0.15 \rightarrow \text{inferior Goods}$$

$$\epsilon_i (\text{Cold car}) = \frac{-150}{4000} \times 100 = \frac{-3.75}{10} = -0.375 \xrightarrow{\% \Delta \text{ in Demand}} \text{inferior}$$

- Income elasticity depends on type of goods.



* Proportionate Method

There is a relationship b/w income elastic for good & proportion of income spent on it

1] Proportion of income spent remains same as income inc./dec.

Income	Amt spent	Proportion of income	Price	Qty.
100,000	10,000	10%	₹1000	10
200,000	20,000	10%	₹1000	20

$\epsilon_i = 1$

2] Proportion of income spent on good increases as income increases.

<u>Income</u>		<u>Amt Spent</u>	<u>Price</u>	<u>Qty</u>
100%	100,000	10,000	₹1000	10
200%	200,000	40,000	₹1000	40

300%

$$\underline{\underline{\epsilon_i > 1}}$$

3] Proportion of income spent on good decreases as income increases.

<u>Income</u>		<u>Amt Spent</u>	<u>Price</u>	<u>Qty</u>
100%	100,000	10,000	₹1000	10
200%	200,000	16,000	₹1000	16

60%

$$\underline{\underline{\epsilon_i < 1}}$$

→ Essential goods

* Income elasticity is more in the long run than Short Run.
 due to availability of more time for adjustments.

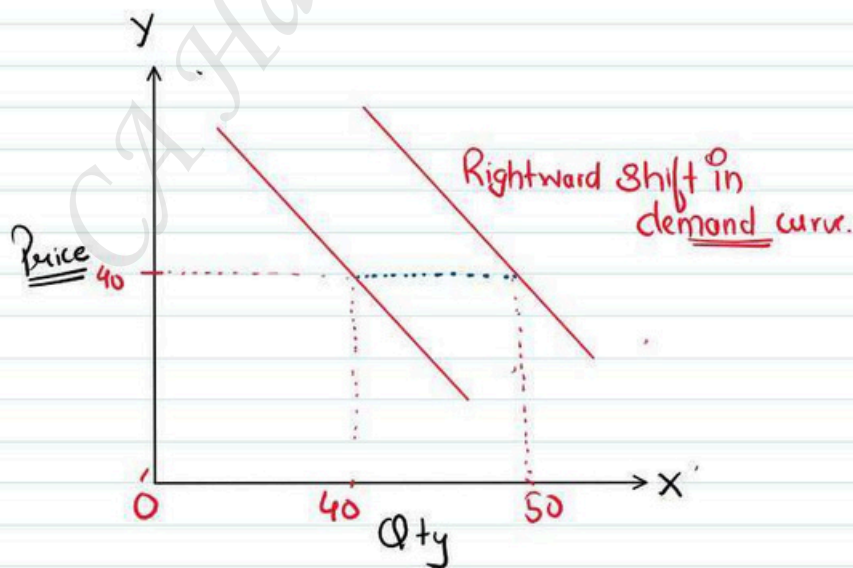
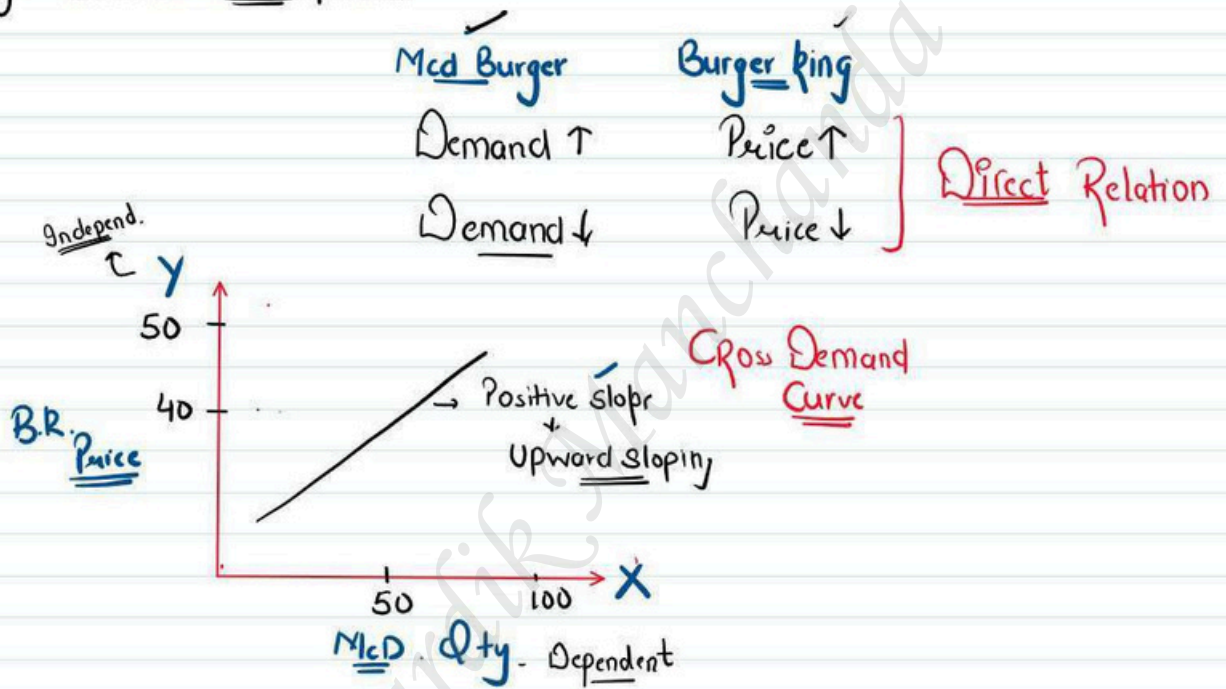
x=====x

Cross-Price Elasticity

20 July 2023 21:01



a) Substitute Goods



* Greater the Cross elasticity, Closer is the substitute

* Greater the Cross elasticity, Closer is the Substitute

a. Perfect Substitute - cross price elasticity is infinite ✓

	Slice & Mazza		
<u>1l</u>	40	40] · Δ
		41	

$$E_c = \frac{\% \Delta \text{ in } Q_x}{\% \Delta \text{ in Price of } y}$$

→ Huge change
- Small change

b. Close Substitute: cross price elastic: positive & large. ✓

c. Not close Substitute: cross price elasticity - positive & small

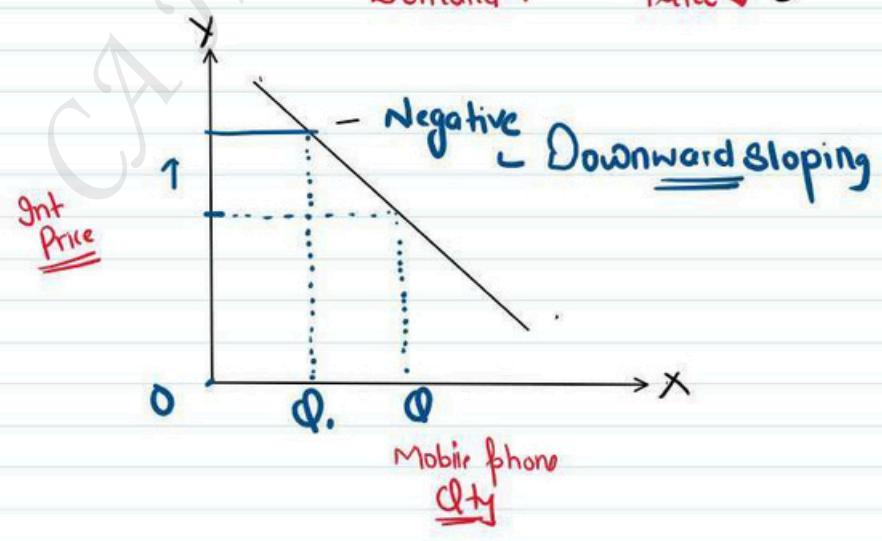
Ex- Ice-tea & cold-coffee

d. Totally unrelated - zero

b) Complementary Goods

Mobile Phone ^{Depend.} Internet ^{Indep}

Demand ↓ Price ↑
Demand ↑ Price ↓ } Inverse relation



* Size of cross-price elasticity b/w 2 complement tells us how strongly complementary they are:

- a) Elasticity slightly below zero - weak complements.
- b) Elasticity - very high - strong complements

→ **Elasticity** - Cross price elasticity of demand b/w 2 goods measures the effect of change in one good price on demand of other good.



$$\epsilon_c = \frac{\% \Delta \text{ in } Q_x}{\% \Delta \text{ in } P_y}$$

$$= \frac{\Delta Q_x}{\Delta P_y} \times \frac{P_y}{Q_x}$$

Ex- 2 brands of notebook.

Imperial Royal

When price of Imperial rises by 10%, demand for Royal increases by 15%.

$$\epsilon_c \text{ for Royal} = \frac{15}{10} = 1.5$$

∴ ...

Ex- Cross price elasticity b/w X & Y = -0.8

If price of good Y rises by 20% & Original quant demand of X is 100 units. Calculate new quant. of X.

$$\epsilon_c = \frac{\% \Delta \text{in } Q_x}{\% \Delta \text{in } P_y}$$

$$-0.8 = \frac{\% \Delta \text{in } Q_x}{20} \Rightarrow \% \Delta \text{in } Q_x = -16\%$$

$$\frac{Q_1 - Q}{Q} \times 100 = -16$$

$$\frac{Q_1 - 100}{100} \times 100 = -16$$

$$Q_1 = -16 + 100 = \underline{84}$$

Ex- Price of 1 kg Tea = ₹30
Qty dem. = 5 kg ✓

If the price of coffee rises from ₹25 to ₹35/kg, quantity demand of tea rises from 5kg to 8kg.

$$\epsilon_c \text{ for tea} = \frac{\Delta Q_T}{\Delta P_C} \times \frac{P_C}{Q_T}$$

$$= \frac{3}{10} \times \frac{25}{5} = \underline{+1.5}$$

→ Advertisement Elasticity

↳ Responsiveness of goods demanded to change in firms spending on advertisement

$$\epsilon_a = \frac{\% \Delta \text{in } Q.D}{\% \Delta \text{in spending on Adv.}}$$

a) Adv. elasticity of demand is positive.

a) Adv. elasticity of demand is positive.

x — x

M.C.Q.

i) Slope of demand curve = -0.5

E_d will be _____ if initial price is ₹20 & initial quantity is 50 units.

a) 0.2

b) 0.6

~~c) 0.8~~

d) None

$$E_d = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$= \frac{1}{-0.5} \times \frac{20}{50} = -0.8$$

2] When price of good 'x' goes up by 10%, its demand fall from 800 units to 600 units. What is E_p of X?

a) -2.5 with flatter demand curve

~~b) 2.5~~ " " " "

c) -2.5 with steeper demand curve

~~d) 2.5~~ " " " "

$$\therefore \Delta \text{m. Qty} = \frac{-200}{800} \times 100 = -25\%$$

$$E_p = \frac{25}{10\%}$$

x — x

→ Demand Forecasting

→ Art & Science of predicting the probable demand for a product at some future period on the basis of certain past behaviour & trends at present.

→ Not simple guessing.

→ Usefulness:

- 1) Budgetary planning & cost control.
- 2) Efficient Production //
- 3) Process Selection
- 4) Capacity Planning ✓
- 5) Facility layout
- 6) Inventory Management
- 7) Cap. Investment can be aligned to demand expectations
- 8) Necessary info. for suitable pricing & advertisement strategies.

$$\begin{array}{r} 10,000 \text{ units} \\ \text{Cost} \rightarrow \\ \text{RM} \\ \text{labour} \\ + \text{Profit} = \underline{\underline{\text{Price}}} \end{array}$$

→ No forecasting is completely full proof & correct.

* Scope of Forecasting.

→ Demand forecasting can be at national level or International

- Demand forecasting can be at national level or International level.
- It can be confined to a given product supplied by a small business in a local area
- Necessary trade-off has to be struck b/w cost of forecasting & the benefits from such forecasting.

* Types of forecasting

On the basis of Size/volume

- a) Firm - forecasting the demand for a particular firm's product
Ex- Demand for Ambuja Cement.
- b) Industry - Demand for the industry's product as a whole.
Ex- Demand for Cement in India.
- c) Macro-level - General economic environment prevailing in the economy.
- Aggregate Demand.

On the basis of time

- a) Short-term
- 6 month - 1 year
- Generally used in Practical dec
- b) Long term
- 2 to 5 year
- Generally used in Strategic dec

* Demand Distinction

a) Producer Goods & Consumer Goods.

- Producer Goods - used for production of other goods.
Ex- Machines & Eq.
- Producer
Consumer

Ex- Machines & Eq.

U I -

Producer Consumer



→ Consumer Goods. used for final consumption.
Ex- Readymade clothes.

b) Durable & Non-Durable Goods

Non-Durable Goods- Cannot be consumed more than once.
Ex- Raw Material, fuel, etc

Consumer
Ex- Bread, food items.

Producer
Ex- Raw Material,
fuel

Durable Goods: Do not quickly wear out, can be used more than one
Ex- Calculator, Mobile phone, clothes.

Consumer
Ex- Books, Mobile
phone, utensils

Producer
Ex- Machines, Tractor,
etc.

c) Derived Demand & Autonomous demand

- Derived demand. Demand for commodity arises because of the demand for some other commodity.

Ex- Internet recharge, Phone cover, Cement, Mobile Phones, Mobile Phones, Building

Complementary

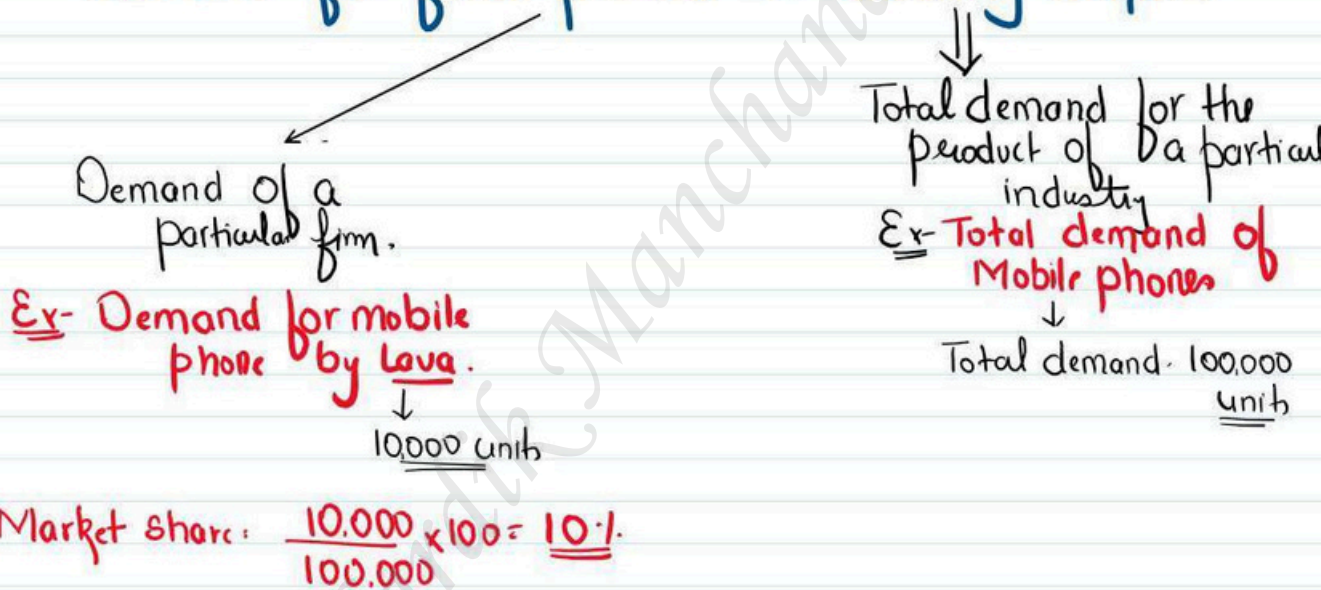
- Autonomous Demand. - Demand for the product is independent of demand for the other goods.

Autonomous Demand. - Demand for the product is independent of demand for the other goods.

* This distinction is purely arbitrary & it is very diff. to find out which product is entirely independent

Imp In general, demand for **producer goods** is **Derived demand**.

d) Demand for firm's product & Industry demand



e) Short-Run Demand & Long-Run Demand

Short-Run Demand - Demand with its immediate reaction in product price, income fluctuations, etc.

Long-Run Demand - Demand which exists over a long period.
- Demand which will ultimately exist as a result of change in price, income, after enough time is allowed to let the market adjust.

x ————— x

1. Factors affecting Demand for Non-Durable Consumer Goods

a) Price - own
- Related Goods

↓
Food.

b) Disposable Income -

c) Demography - Characteristics of population

Ex- Chocolate / Ice-cream
↓
No. of children

Ex- Petrol. fuel
↓
No. of Cars

*

2. Factor affecting Demand for Durable consumer goods

↓
Laptop, Mobile phones.

a. A customer can postpone the replacement of durable goods

↓
It depends upon factors like social status,
level of income, obsolescence, etc

b. The goods requires special facilities for their use.

Ex- Roads for automobiles
Electricity for AC/refrigerators
Internet for Mobile phones.

c. Influenced by family characteristics.

↓
Income of the family, Size of family, etc.

d. Replacement of demand

↳ Great the current holding of durable goods, greater will be the replacement demand.

e. Influenced by prices & credit facilities.

3. Factors affecting Demand for producer goods.

↓
Derived demand

It depends upon the:

- Rate of profitability of user industry (Consumer goods)
- Size of Market of user industries.

Hence, data required for estimating demand:

- Growth prospect of user industries.
- Norms of consumption of producer goods per unit of installed capacity

Ex- Mach 1 - Max. capac - 1000 unit per day ✓
 As per current demand, - 200 unit per day.
 ↓ Demand for user goods ↑
Demand forecast - 800 unit per day

Other Imp point

- Change in price of substitutable & complement factors.
- Advances in technology
- If firms are optimistic about selling higher output in future. → More investment in producer goods

x=====x

Theory of Demand - Complete ✓

MCQs

26 July 2023

21:54



MCQs_26th
July

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Multiple Choice Questions

66) Goods which have fewer substitutes are

- a) Less elastic
- b) Unit elastic
- c) More elastic
- d) Perfectly elastic

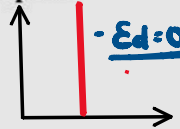
67) Demand for electricity is elastic because

- a) It is very expensive
- b) It has a number of close substitutes
- c) It has alternative uses
- d) None of the above

Multiple Choice Questions

68) A demand curve parallel to Y-axis implies

- a) $E_d = 0$
- b) $E_d = 1$
- c) $E_d < 1$
- d) $E_d > 1$



69) Price elasticity of Demand for addictive products like Cigarettes and alcohol would be

- a) Greater than 1
- b) Less than 1
- c) Infinity
- d) One

Multiple Choice Questions

70) A demand curve parallel to Y-axis implies

- a) $E_d = 0$
- b) $E_d = 1$
- c) $E_d < 1$
- d) $E_d > 1$

71) What is the new quantity demanded when price elasticity is 1 and price changes from Rs. 15 to Rs. 10 and the original quantity demanded was 10 units?

- a) 15 units
- b) 20 units
- c) 8 units
- d) 12 units

$$-1 = \frac{\Delta Q}{-5} \times \frac{15}{10} \quad \Delta Q = \frac{-5 \times 10}{15}$$

None of the above ✓

Multiple Choice Questions

72) A demand curve parallel to Y-axis implies

- a) $E_d = 0$
- b) $E_d = 1$
- c) $E_d < 1$
- d) $E_d > 1$

73) If the demand for a product is inelastic, an increase in its price will cause the Total Expenditure of the Consumers to:

- a) Remain the same
- b) Increase
- c) Decrease
- d) Any of these

Multiple Choice Questions

74) Ceteris paribus, what would be the impact on foreign exchange earnings for a given falling export prices, if the demand for the country's exports is inelastic?

- a) Foreign Exchange Earnings decrease
- b) Foreign Exchange Earnings increase
- c) No effect on Foreign Exchange earnings
- d) None of the above

Revenue

Price ↓ Rev. ↓

75) Goods having Income elasticity > 1 are considered as

- a) Luxury goods ✓
- b) Necessities
- c) Normal goods
- d) Inferior goods

Multiple Choice Questions

76) If Income Elasticity < 1 , it means that proportion of Income spent on goods, as income of the Consumers increases:

- a) Increases
- b) Decreases ✓
- c) Remains constant
- d) None of the above

Income ↑ Inelastic
Proportion of Income ↓

77) If the co-efficient of cross elasticity of demand for X & Y is 2, it means that X and Y are:

- a) Complementary goods
- b) Substitute goods ✓
- c) Inferior goods
- d) Normal goods

Positive

Multiple Choice Questions

78) Which type of forecasting is done while taking tactical decisions?

- a) Long-run forecasting
- b) Short-run forecasting
- c) Macro-level forecasting
- d) None of the above

79) The demand for which type of goods is likely to be derived demand?

- a) Consumer goods
- b) Non-durable consumer goods
- c) Non-durable producer goods ↳ Derived
- d) Durable goods

Multiple Choice Questions

80) Demand which arises on its own out of innate desire of the consumer to consume?

- a) Derived demand
- b) Autonomous demand
- c) Short-run demand
- d) Long-run demand

81) The goods which cannot be consumed more than once is known as

- a) Durable goods
- b) Non-durable
- c) Producer goods
- d) None of the above



Multiple Choice Questions

82) Demand which arises on its own out of innate desire of the consumer to consumer?

- a) Derived demand
- b) Autonomous demand
- c) Short-run demand
- d) Long-run demand

83) The goods which cannot be consumed more than once is known as

- a) Durable goods
- b) Non-durable
- c) Producer goods
- d) None of the above

[Mentoring Sessions - Zoom | Google Meet]
1. Personal problems
2. Strategy | Planning

Group - 20-30
Weekends

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MCQs

18 July 2023 20:06



MCQs_18th
July

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Multiple Choice Questions

23) In the case of a straight line demand curve meeting the two axis, the price elasticity of demand at the mid-point of the line would be:

- a) 0
 - b) 1
 - c) 1.5
 - d) 2
- Geometric*

24) Identify the factor which generally keeps the price-elasticity of demand for a good low:

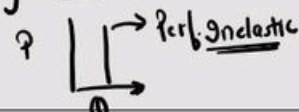
- a) Variety of uses for that good *Elastic*
- b) Very low price of a commodity - *Inelastic*
- c) Close substitute for that good *Elastic*
- d) High proportion of the consumers' income spent on it.

Multiple Choice Questions

25) If the demand for a good is inelastic, an increase in its price will cause the total expenditure of the consumers of the good to:

- a) Remain the same
 - b) Increase
 - c) Decrease
 - d) Any of these
- Expenditure Method*
 $\text{Price effect} > \text{Qty eff} = \epsilon_p \leq 1$
Price & Exp - Direct

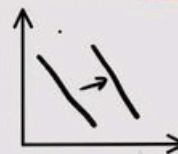
26) If regardless of change in its price, the quantity demanded of a good remains unchanged, then the demand curve for the good will be:

- a) Horizontal
 - b) Vertical
 - c) Positively sloped
 - d) Negatively sloped
- perfectly Inelastic*


Multiple Choice Questions

27) Suppose the price of Pepsi increases, we will expect the demand curve of Coca cola to: ↑

- a) Shift towards left since these are substitutes
- b) Shift towards right since these are substitutes
- c) Remains at the same level
- d) Any of these



28) Given the following four possibilities, which one results in an increase in total consumer expenditure? ✓

- a) Demand is unitary elastic and price falls
- b) Demand is elastic and price rises
- c) Demand is inelastic and price falls
- d) Demand is inelastic and price rises

Qty effect > Price eff. } Elastic
P ↓ E ↑
Inverse

Multiple Choice Questions

29) If electricity demand is inelastic, and electricity charges increase, which of the following is likely to occur? $P \uparrow Q_D \text{ small}$

- a) Quantity demanded will fall by a relatively large amount
- b) Quantity demanded will fall by a relatively small amount
- c) Quantity demanded will rise in the short run, but fall in the long run ✗
- d) Quantity demanded will fall in the short run, but rise in the long run ✗

20) Point elasticity is useful for which of the following situations?

- a) The bookstore is considering doubling the price of notebooks
- b) A restaurant is considering lowering the price of its most expensive dishes by 50 percent
- c) An auto producer is interested in determining the response of consumers to the price of cars being lowered by Rs. 100
- d) None of the above

Multiple Choice Questions

Expenditure

- 31) A decrease in price will result in increase in total revenue if: $-\epsilon_p > 1 \cdot Q_{td} \downarrow > P_{inc} \downarrow$
- a) The % change in quantity demanded is less than the % change in price.
 - b) The % change in quantity demanded is more than the % change in price.
 - c) Demand is inelastic
 - d) The consumer is operating along a demand curve at a point at which the price is very low and the quantity demanded is very high

32) Demand for a good will tend to more elastic if it exhibits which of the following characteristics?

- a) It represents a small part of consumers' income. *Inelastic*
- b) The good has many substitute available
- c) It is a necessity. *Inelastic*
- d) There is little time for the consumer to adjust the price change. *Elastic*

Multiple Choice Questions

33) If the demand for a product is independent of the demand for other goods, it is called

- a) Tied demand
- b) Autonomous demand
- c) Derived demand
- d) None of these

34) Coefficient of price elasticity of demand ranges from __ to __

- a) One; infinity
- b) Zero; infinity ✓
- c) Zero; one
- d) None of the above

Multiple Choice Questions

35) Elasticity is greater than unity for: Ep > 1

- a) Necessaries
- b) Luxuries
- c) Complementary goods
- d) None of these

36) Demand is _____ in the longer period than in the short period

- a) Less elastic
- b) Perfectly elastic ✗
- c) Perfectly inelastic ✗
- d) More elastic ✓

Multiple Choice Questions

37) On straight line demand curve, the elasticity of demand at a point where it meets the price axis

- a) 1
- b) 2
- c) 0
- d) Infinite



38) Demand is _____ in the longer period than in the short period

- a) Less elastic
- b) Perfectly elastic
- c) Perfectly inelastic
- d) More elastic

Multiple Choice Questions

39) The exact ~~and~~ price **co-efficient** of elasticity cannot be found by _____ method

- a) Proportionate method - % Method →
- ~~b) Geometric method~~
- c) Arc elasticity
- d) All of the above

Price elasticity $\times = \times$

MCQs

12 July 2023

18:54



MCQs_12th
July

CA Hardik Manchanda

Multiple Choice Questions

11) ___ is a tabular presentation showing different quantities demanded by buyers at different level of prices in a given period.

- a) Supply schedule
- b) Demand schedule
- c) Production schedule
- d) Cost schedule

12) If the demand for 'A' increases as price of 'B' increases, the two goods are:

- a) Normal goods
- b) Complementary goods
- c) Substitute goods - Direct
- d) Superior goods

Multiple Choice Questions

13) In case the customer expects a steep rise in price of Potatoes in future, his current demand for it will

- a) Remain same
- b) Fall
- c) Rise
- d) None of the above

14) If the demand for petrol remains unchanged with rise in its price, it means petrol is a

- a) Normal good
- b) Necessity
- c) Luxury good
- d) Giffen good

Multiple Choice Questions

15) Identify the coefficient of price-elasticity of demand when the percentage increase in the quantity of a good demanded is smaller than the percentage fall in its price:

- a) Equal to one
- b) Greater than one
- c) Less than one $E_{p < 1}$
- d) Zero

16) If regardless of changes in price the quantity demanded of a good remains unchanged, then the demand curve for the good will be:

- a) Horizontal
- b) Vertical — Parallel to Y axis, Perf. Inelastic
- c) Positively sloped
- d) Negatively sloped

Multiple Choice Questions

17) The price of hot dogs increases by 22% and the quantity of hot dogs demanded falls by 25%. This indicates the demand for hot dogs is:

- a) Elastic - $E_{p > 1}$
- b) Inelastic
- c) Unitarily elastic
- d) Perfectly elastic

$$25 > 22$$

18) Suppose the demand for meals at a medium priced restaurant is elastic. If the management of the restaurant is considering raising prices, it can expect a relatively:

- a) Large fall in quantity demanded \uparrow Price
- b) Large fall in demand
- c) Small fall in quantity demanded
- d) Small fall in demand

Multiple Choice Questions

19) A consumer buys 220 units of a good at a price of Rs. 10 per unit. Suppose price elasticity of demand is 10. At what price will he/she buy 120 units?

- a) Rs. 9.5
- b) Rs. 10.5
- c) Rs. 12

d) None of the above 10.45

$$E_p = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$P = 10.45$$

$$10 = \frac{100}{\Delta P} \times \frac{10}{220}$$

$$\Delta P = \frac{100 \times 10}{10 \times 220} = \frac{10}{22} = 0.45$$

20) We made the demand curve, and its shape is fairly flat. Elasticity of demand will be:

- a) $E_p = 1$
- b) $E_p > 1$
- c) $E_p < 1$
- d) $E_p = 0$

x ————— x

MCQs

21 July 2023 21:02



MCQs_21st
July

CA Hardik Manchanda

Multiple Choice Questions

39) Contraction of demand is the result of

- a) Decrease in the number of consumers
- b) Increase in the price of goods concerned
- c) Increase in the price of other goods
- d) Decrease in the income of purchasers

40) In the case of inferior good, the income elasticity of demand is:

- a) positive
- b) zero
- c) Negative ✓
- d) infinite

Multiple Choice Questions

41) All of the following are determinants of demand except:

- a) Tastes & preferences ✓
- b) Quantity supplied ✓
- c) Income of the consumer ✓
- d) Price of related goods ✓

42) If a good is a luxury, its income elasticity of demand is

- a) Positive and less than 1
- b) Negative but greater than 1
- c) Positive and greater than 1 ✓
- d) Zero

~~NEG~~
 tive
 Lux. Essent
 Elastic $E < 1$
 $E > 1$

Multiple Choice Questions

43) If the quantity demanded of X increases by 5% when the price of Y increases by 20%, the cross price elasticity of demand between X & Y is:

- a) -0.25
- b) 0.25
- c) -4
- d) 4

$$\frac{5}{20} = 0.25$$

Subs

44) When the numerical value of cross elasticity between two goods is very high, it means:

- a) The goods are perfect complements and therefore have to be used together.
- b) The goods are perfect substitutes and can be used with ease in place of one another
- c) There is a high degree of substitutability between the goods
- d) The goods are neutral and therefore cannot be considered as substitutes.

Multiple Choice Questions

45) Which of the following is an incorrect statement?

- a) When goods are substitutes, a fall in the price of one leads to a fall in the quantity demanded of its substitutes ✓
- b) When commodities are complements, a fall in the price of one will cause the demand of the other to rise ✓
- c) As the income of the consumer increases, the demand for the commodity increases always & vice versa
- d) When a commodity becomes fashionable people prefer to buy it and therefore its demand increases. ✓

Multiple Choice Questions

46) In the case of Giffen good, the demand curve will usually be:

- a) Horizontal
- b) Downward sloping to the right
- c) Vertical
- d) Upward sloping to the right

47) When the income increases the money spent on necessaries of life may not increase in the same proportion. This means

- a) Income elasticity of demand is zero
- b) Income elasticity of demand is one
- c) Income elasticity of demand is greater than one
- d) Income elasticity of demand is less than one

Multiple Choice Questions

48) The price of tomatoes increases and people buy tomato puree. You infer that tomato puree and tomatoes are

- a) Normal goods
- b) Complements
- c) Substitutes
- d) Inferior goods

49) When total demand for a commodity whose price has fallen increases, it is due to

- a) Income effect
- b) Substitution effect
- c) Complementary effect
- d) Price effect $\left\{ \begin{array}{l} \text{Income} \\ \text{Subst.} \end{array} \right.$

Multiple Choice Questions

50) The demand function is given as $Q = 100 - 10P$. Find the elasticity using point method when price is Rs. 5 ✓

- a) 2
- b) -2
- c) 1
- d) -1

$$E_p = \frac{dq}{dp} \times \frac{P}{Q} = -10 \times \frac{5}{50} = -1$$

negative

$$Q = 50$$

51) No matter what the price of coffee is, Arjun always spend a total of exactly Rs. 100 per week on coffee. The statement implies that: ^{Expenditure}

- a) Arjun is very fond of coffee and therefore he has an inelastic demand for coffee
- b) Arjun has elastic demand for coffee
- c) Arjun's demand for coffee is relatively less elastic
- d) Arjun's demand for coffee is unit elastic

Multiple Choice Questions

52) A firm learns that the own price elasticity of a product it manufactures is 3.5. What should be the correct action for the firm if it wishes to raise its total revenue? ^{- Elastic? P & R. negative Rev ↑ Price ↓}

- a) Lower the price because demand for the good is elastic
- b) Raise the price because demand for the product is elastic
- c) Raise the price because demand is elastic
- d) We need information in order to answer this question.

53) At higher prices people demand more of a certain goods not for their worth but for their prestige value- This is called

- a) Veblen effect
- b) Giffens paradox
- c) Speculative effect
- d) None of the above

Multiple Choice Questions

54) If the price of air-conditioner increases from Rs. 30,000 to Rs. 30,010 and resultant change in demand is negligible, we use the measure of ____ to measure price elasticity

- a) Point elasticity of demand since it is a small change
- b) Arc elasticity of demand since it is a small change
- c) Price elasticity based on average price method
- d) Any of the above

55) The cross elasticity between personal computers and software is: ^{complement}

- a) Positive
- b) Zero
- c) Negative
- d) One

Multiple Choice Questions

56) The cross elasticity between Bread & DVDs is:

- a) Positive
- b) Negative
- c) Zero
- d) One

57) Suppose the income elasticity of education in private school in India is 3.6. ^{elastic}
What does this indicate:

- a) Private school education is highly wanted by rich
- b) Private school education is a necessity
- c) Private school education is a luxury
- d) We should have more private schools

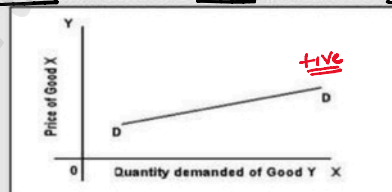
Multiple Choice Questions
 $P \uparrow \quad R \uparrow \cdot \text{inelastic} \quad \% \Delta \text{ in Price} > \% \Delta \text{ in Qty}$

58) If the organizers of an upcoming cricket match decide to increase the ticket price in order to raise its revenues, what they have learned from past experience is:

- a) The % increase in ticket rates will be always equal to the % decrease in tickets sold
- b) The % increase in ticket rates will be always greater than the % decrease in tickets sold
- c) The % increase in ticket rates will be less than the % decrease in tickets sold
- d) a) and c) are true

Multiple Choice Questions

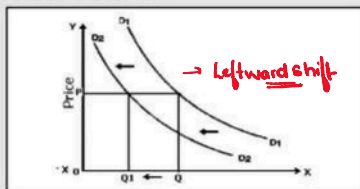
59) The following diagram shows the relationship between price of Good X and quantity demanded of Good Y. What we infer from the diagram is:



- a) Good X and Good Y are perfect substitutes - ∞
- b) Good X and Good Y are perfect complements
- c) Good X and Good Y are remote substitutes - $E < 1$ - Steeper
- d) Good X and Good Y are close substitutes - $E > 1$ - flatter

Multiple Choice Questions

60) The diagram given below shows:



- a) A change in demand which may be caused by a rise in income and the good is a normal good. - Rightward shift
- b) A shift of demand curve caused by a fall in price of complement good. - Rightward shift
- c) A change in demand which is caused by a rise in income and the good is an inferior good
- d) A shift of demand curve caused by a rise in the price of a substitute and the good is a normal good. - Rightward

Multiple Choice Questions

61) The demand curve of a normal good has shifted to the right. Which of the four events would have caused the shift?

- a) A fall in the price of a substitute with the price of the good unchanged. - Leftward
- b) A fall in the nominal income of the consumer and a fall in the price of the normal good
- c) A fall in the price of a complementary good with the price of the normal good unchanged
- d) A fall in the price of the normal good, other things remaining the same.

↓
Shift x
Movement - Expansion

Multiple Choice Questions

62) The average income of residents of two cities A and B and the corresponding change in demand for two goods is given in the following table. Which of the following statements is true? X

City	% Increase In Income	% change in demand for Good X	% change in demand for Good Y
✓ A	12 ✓	6.5 NG	-2.3 infer.
B ✓	9 ✓	5.6 NG	1.6 NG

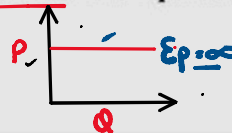
- a) Both goods are normal goods in both cities A and B
 ✓ b) Good X is a normal good in both cities; Good Y is an inferior good in city A
 c) Good X is a normal good in both cities; Good Y is an inferior good in city B
 d) Need more information

Multiple Choice Questions

63) Slope of perfectly elastic demand curve is equal to:

- a) 0
 b) 1
 c) 2
 d) Infinity

$$\frac{\Delta P}{\Delta Q} = 0$$



64) As the demand curve becomes flatter and flatter, the elasticity of demand becomes

- ✓ a) higher
 b) lower
 c) Equal to infinity
 d) Equal to zero

Multiple Choice Questions

65) A consumer buy 80 units of a commodity at Rs. 4 per unit. When the price falls, he buy 100 units. If Ed = -1, the new price will be:

- a) Rs. 3.5
- b) Rs. 3
- c) Rs. 2.5
- d) Rs. 2

$$-1 = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$-1 = \frac{20}{\Delta P} \times \frac{4}{80}$$

$$-1 = \frac{1}{\Delta P}$$

$$\Delta P = -1$$

$$P_2 - P_1 = -1$$

$$P_2 - 4 = -1$$

$$P_2 = -1 + 4$$

$$= 3$$

x ——— x ——— x