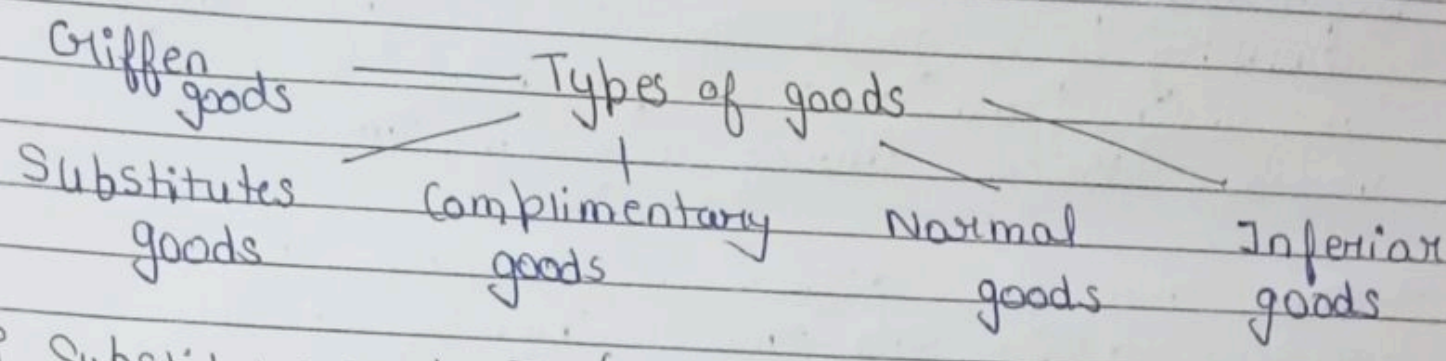


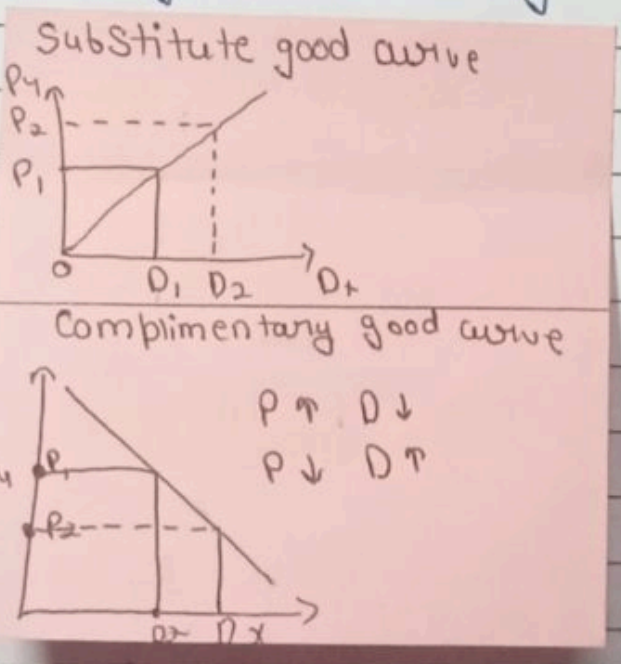
Chapter 2 "Theory of Demand and Supply"

Unit 1 -> Law of Demand and Elasticity of Demand.



i Substitutes goods -> (replacement) (competing)
 These goods are those goods which can be easily used in the place of each other
 Tea or coffee
 $P_y \uparrow \rightarrow D_x \uparrow$ (Positive / Direct relation)

ii Complimentary goods -> $P_y \uparrow \rightarrow D_x \downarrow$ (negative / Indirect opposite relation)
 These goods are those goods which are used together / Jointly. "Car and Petrol"



iii Normal goods ->
 Income $\uparrow \rightarrow D \uparrow$
 " " $\downarrow \rightarrow D \downarrow$
 Direct relation b/w Income & Demand.

iv Inferior goods ->
 (low quality goods according to us)
 Income $\uparrow \rightarrow$ Jiska Demand
 \downarrow
 Income $\downarrow \rightarrow$ Jisko Chora.
 \uparrow

Demand + ability to purchase + willingness → Demand
Desire

Definition of Demand

→ Quantity of a goods or services that buyers are willing and able to purchase at various prices during a given time.

→ More than just desire, it involves the ability to pay and the willingness to use that means for a purchase.

Quantity Demanded → Always expressed at a given price

Represents a continuous flow of purchases over a period of time.

Demand is a flow concept

[Imp 2.7]

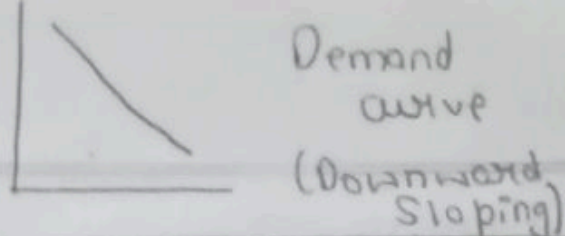
Determinants of Demand &

- | | | |
|-----|-------------------------|---|
| i | Price of the commodity | P |
| ii | Price of related goods | R |
| iii | Disposable Income. | I |
| iv | Tastes and Preferences. | T |
| v | Consumer Expectations. | |

↓ Future P ↑ → Current D ↑

↓

↓



Demand Function &

It refers to the functional relationship b/w the demand for a product and its determinants

$$D_x \rightarrow f(\text{TIPPER AENG})$$

Law of Demand &

Price of own goods \rightarrow other factors are constant

$P \uparrow \quad D \downarrow$
 $P \downarrow \quad D \uparrow$

Definition & - States an inverse relationship between the price of a goods and the quantity demanded assuming other factor.

The greater the amount to be sold, the smaller must be the price (Alfred Marshall)

Demand Schedule &

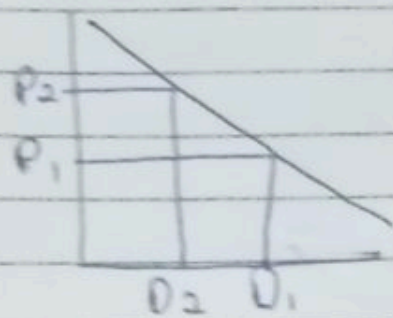
A table showing quantities of a goods at different prices assuming other factors are constant

S.No	Price	Demand
A	10	20
B	20	10
C	30	0

Market demand & - Market Demand shows the total quantity demanded by all the buyers at different prices.

Movement along Demand curve &

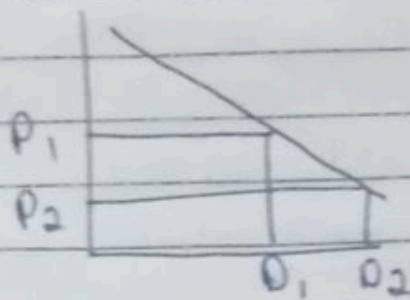
$P \uparrow$ $Q \downarrow$



↓
Contraction of Demand

↓
upward movement

$P \downarrow$ $Q \uparrow$



↓
Extension of demand

↓
downward movement

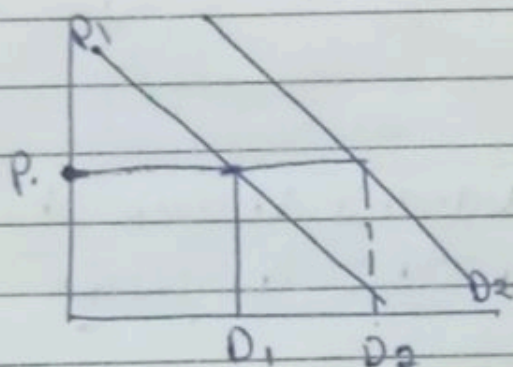
→ **Change in Demand** due to change in factors other than Price of own goods.

Shift in DD curve

Increase in DD

Rightward shift

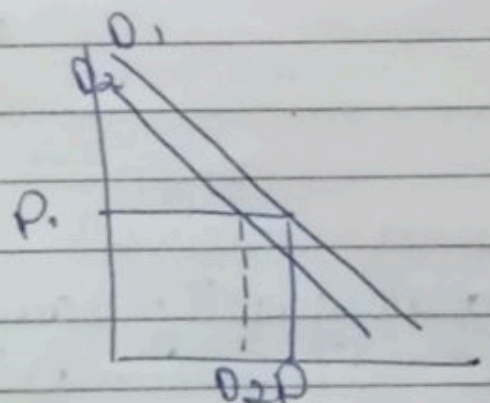
P (constant) $Q \uparrow$



Decrease in DD
or

leftward shift

P (constant) $Q \downarrow$



Elasticity of Demand E_p is defined as the degree of responsiveness of the quantity demanded of a good to changes in one of the variables on which demand depends.

Determinants of Price E_p (2:35)

Price Elasticity \rightarrow $\frac{\% \text{ change in quantity demanded}}{\% \text{ change in price}}$

$\% \text{ change in price}$

Price Elasticity \rightarrow

$$\frac{\text{Change in quantity} \times 100}{\text{Original quantity}}$$

$E_p \rightarrow$

$$\frac{\text{Change in price} \times 100}{\text{Original price}}$$

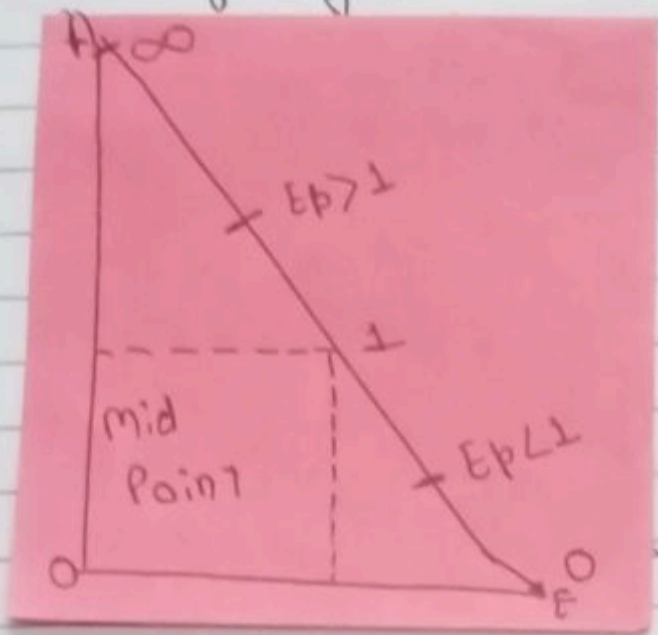
Types of elasticity

i Point Elasticity \rightarrow The point elasticity of demand is the price elasticity of demand at a particular point on the demand curve.

ii Price Elasticity \rightarrow

Types of E_p

- i Unit elastic DD $\rightarrow E_p \rightarrow 1$
- ii Elastic DD $\rightarrow -E_p > 1$
- iii Inelastic DD $\rightarrow E_p < 1$
- iv Perfectly Elastic DD $\rightarrow E_p \rightarrow \infty$
- v Perfectly Inelastic DD $\rightarrow E_p \rightarrow 0$



Arc - Elasticity
mid point method

$$E_p \rightarrow \frac{\Delta Q}{\Delta P} \times \frac{P_1 + P_2}{Q_1 + Q_2}$$

Total Exp method
Outlay

$$\begin{array}{l} P \uparrow \quad TE \downarrow \rightarrow E_p > 1 \\ P \downarrow \quad TE \uparrow \end{array}$$

$$\begin{array}{l} P \uparrow \quad TE \downarrow \rightarrow E_p < 1 \\ P \downarrow \quad TE \uparrow \end{array}$$

TE \rightarrow Total expenditure

if TE is constant then $E_p \rightarrow 1$

Total revenue \rightarrow Price \times Quantity

Income Elasticity of Demand

$$E_i \rightarrow \frac{\% \Delta \text{ in } QD}{\% \Delta \text{ in income}} \rightarrow \frac{\Delta Q}{\Delta Y} \times \frac{Y}{Q}$$

E_i
Negative Positive

Inferior goods

Normal goods

$E_i \rightarrow 0$
Neutral goods

Necessities

Luxury

E_p $[0-1]$

$E_p > 1$

Cross-Price Elasticity &

(related to two goods) (Substitute goods)

$$E_c \rightarrow \frac{\% \Delta \text{ in } Q_D}{\% \Delta \text{ in } P_Y} \rightarrow \frac{\Delta Q_X}{\Delta P_Y} \times \frac{P_Y}{Q_X}$$

if $E_c \rightarrow$ Negative then goods \rightarrow Complementary goods

if $E_c \rightarrow$ Positive then goods \rightarrow Substitute Goods

if $E_c \rightarrow 0$ then goods are unrelated.

Advertisement Elasticity &

$$E_a \rightarrow \frac{\% \Delta \text{ in } Q_D}{\% \Delta \text{ in } \text{expon-Adv}} \rightarrow \frac{\Delta Q}{\Delta A} \times \frac{A}{Q}$$

E_i
Negative Positive

Inferior goods

Normal goods

$E_i \rightarrow 0$
Neutral goods

Necessities

Luxury

E_p $[0-1]$

$E_p > 1$

Cross-Price Elasticity &

(related to two goods)

(Substitute goods)

$$E_c \rightarrow \frac{\% \Delta \text{ in } Q_D}{\% \Delta \text{ in } P_Y}$$

$$\rightarrow \frac{\Delta Q_X}{\Delta P_Y} \times \frac{P_Y}{Q_X}$$

if $E_c \rightarrow$ Negative then goods \rightarrow Complementary goods

if $E_c \rightarrow$ Positive then goods \rightarrow Substitute Goods

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Advertisement Elasticity &

$$E_a \rightarrow \frac{\% \Delta \text{ in } Q_D}{\% \Delta \text{ in } \text{expon-Adv}}$$

$$\rightarrow \frac{\Delta Q}{\Delta A} \times \frac{A}{Q}$$