

### Elasticity

a measure of the responsiveness of one economic variable following a change in another variable.

$$\text{PED} = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in price}}$$

$$\% \text{ Change} = \frac{\text{New Value} - \text{Old Value}}{\text{Old Value}} \times 100$$

### Interpreting Elasticities

$\text{PED} = 0$  Perfectly Elastic.

- demand stays constant regardless of changes in the price (theoretically not real).

$\text{PED} = 1$  Unitary Elastic.

- change of 1 % in price leads to a 1% change in the quantity demanded.

$\text{PED} < 1$  Demand is Inelastic.

- consumers are insensitive to changes in the price and their purchasing behaviour does not change when prices rise.

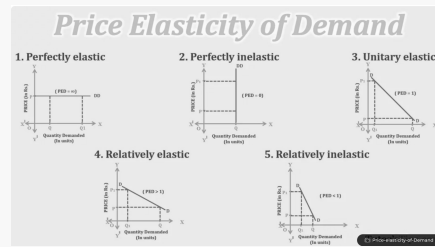
$\text{PED} > 1$  Demand is Price Elastic.

- consumers are very sensitive to changes in price and 1% increase in price causes a drop in the quantity demanded of more than 1%.

If  $\text{PED} = \infty$  Perfectly Price Elastic.

- any price change will lead the demand to fall to Zero and price reductions will not boost sales.

### Curve of Elasticities of Demand



### Determinants of Price Elasticity of Demand

1. Necessities vs. Luxuries