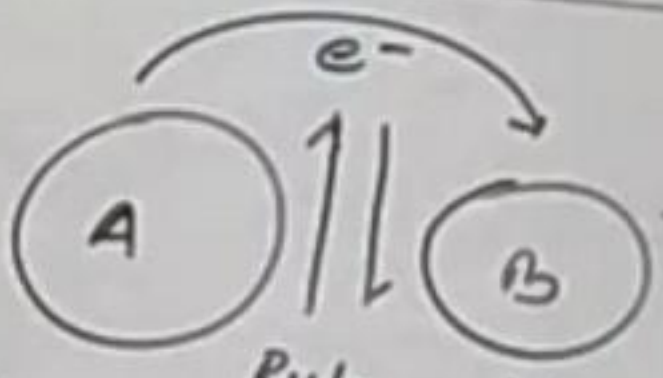
## Methods of charging

(i) Charging by friction:




low work function (+ve)

high work function (-ve)

e-

Silk — glass

H.W.F. L.W.F

-ve +ve

### Work function

It is the min energy required to remove an e-

Charging by dielectric polarisation

Properties of electric charge

(i) additivity

charge can be added or subtracted

$+5C \quad -2C = +3C$

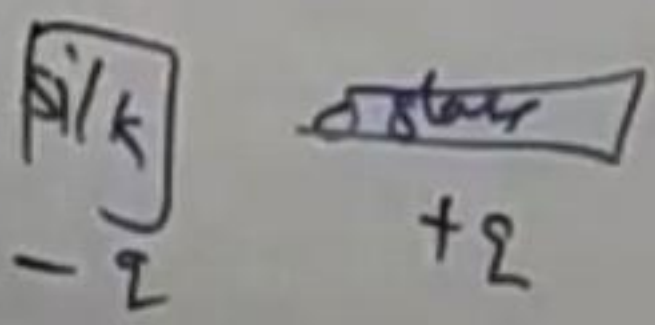
$-5C \quad +2C = -3C$

$-2 \quad +2 = 0$

(ii) conservation

$NaCl \rightleftharpoons Na^+ + Cl^-$

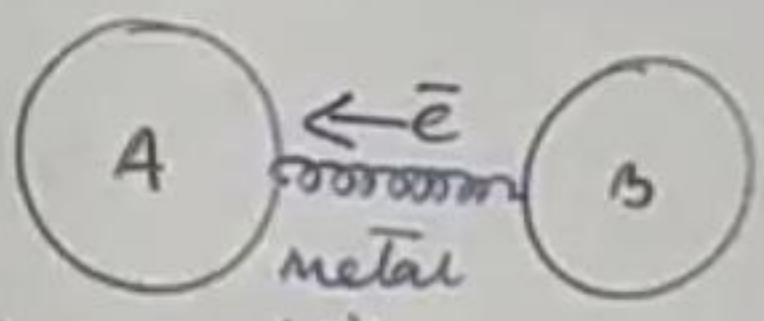
$+e \qquad -e$



(ii) Charging by Conduction

↓

potential




| high | low |
|---|---|
| +5V | +2V |
| −3V | −5V |
| +5V | 0V |
| 0 | −5V |

(iii) Charging by induction