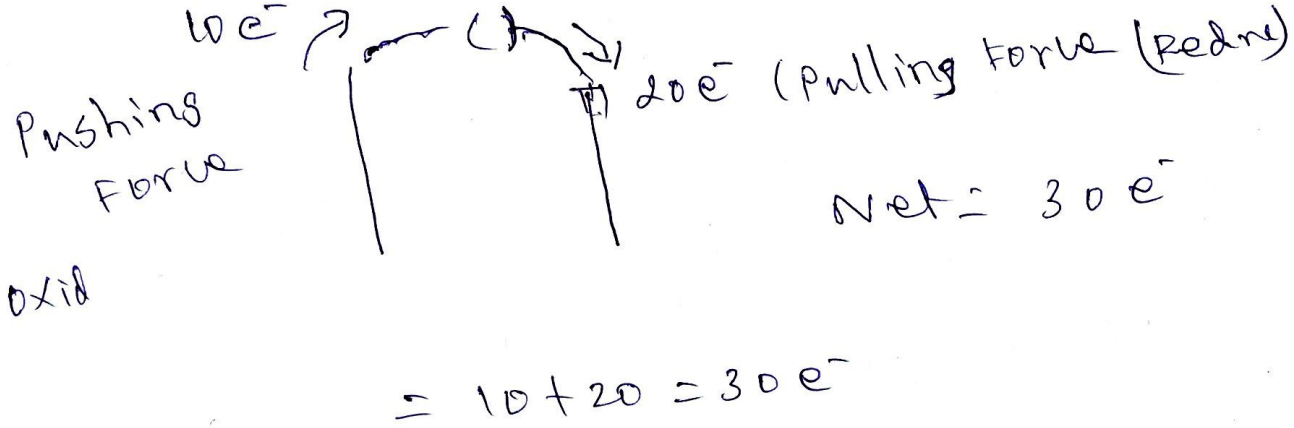
$$E_{cell} = E_C - E_A \quad (or) \quad E_{RH} - E_{LHS}.$$

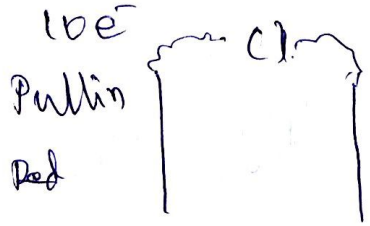
$$= \left.\begin{matrix}\text{Redn} \\ \text{Potnl} \\ \text{cathe}\end{matrix}\right\} - \left\{\begin{matrix}\text{Redn} \\ \text{Potnl} \\ \text{Anod.}\end{matrix}\right.$$



$$= 10 + 20 = 30\,e^-$$

$$\text{x pushing Force (oxidn)} = -\text{x Pulling Force (Redn)}$$

For instance



$$\text{Net} = 20 - 10 = 10e$$

$$= E_C - E_A$$

Hence

$$EMF = E_{cell} = E_C - E_A$$