

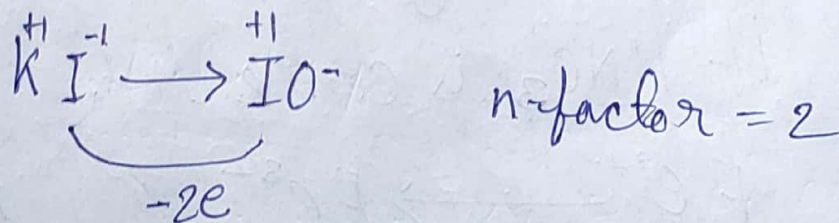
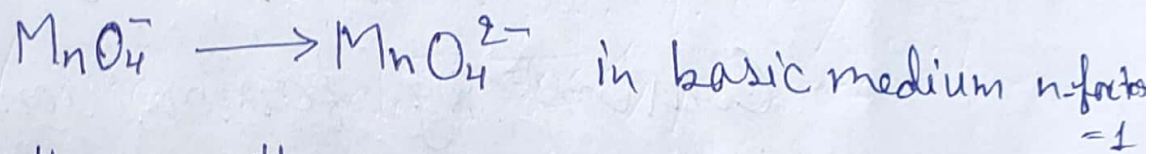
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Ques Find no. of moles of KMnO_4 required to oxidise 2 mol KI in basic medium.



$$n \times 1 = 2 \times 2 \quad \text{no. of g. eq. of } \text{KMnO}_4 = \text{g. eq. of } \text{KI}$$

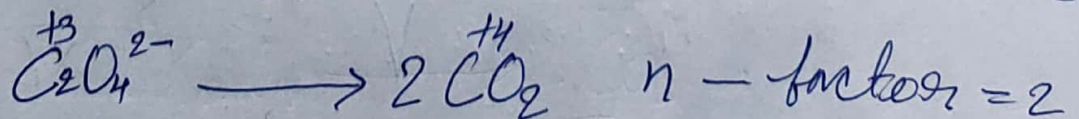
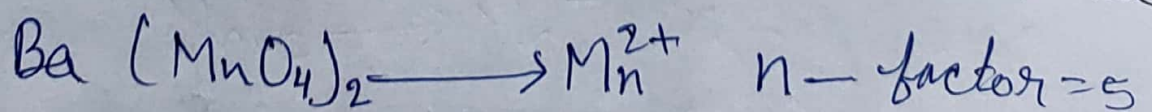
$n = 4$

$n \times n\text{-factor} = n\text{-factor}$

$$n \times 1 = 2 \times 2$$

$$n = 4 \text{ mol}$$

Ques Find no. of moles of Barium Permanganate required to oxidise 2 mol of oxalate ion.
→ acidic



$$\underbrace{\hspace{10em}}_{-1e^- \times 2} = 2$$

g. eq. of $Ba(MnO_4)_2 = g. eq. of C_2O_4^{2-}$

$n \times n \text{ factor} = n \times n - \text{factor}$

$$n \times 5 = 2 \times 2$$

$$n = \frac{4}{5}$$

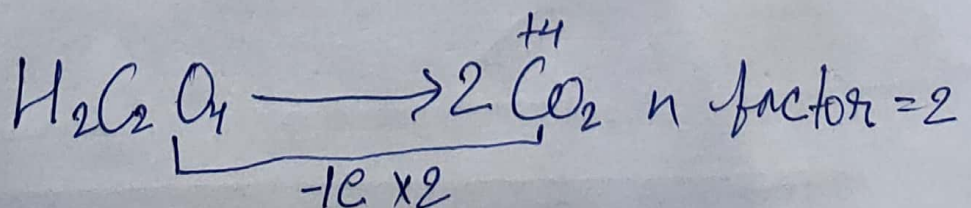
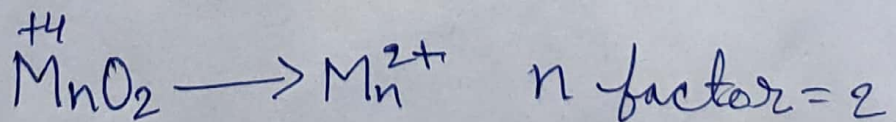
Ques In the reaction $X + Y \rightarrow XY$ 10g eq. of oxidant X require 5g. eq. of Y to give 100ml XY. Find Normality of XY

$$L.R. = Y$$

$$\text{Normality } XY = \frac{\text{no. of g. eq.}}{\text{Vol (L)}}$$

$$= \frac{5}{\frac{100}{1000}} = 50 N$$

Ques Find wt. of MnO_2 reduced by 25ml 0.16N oxalic acid.



$$\text{g. eq. of MnO}_2 = \text{g. eq. of H}_2\text{C}_2\text{O}_4$$

$$\frac{W}{M} \times n\text{-factor} = N \times V$$

$$W = \frac{0.16^8}{2 \times 1000} \times \frac{25}{1000} \times 10^5$$

$$= \frac{1}{500} \times 10^5 = 0.1$$