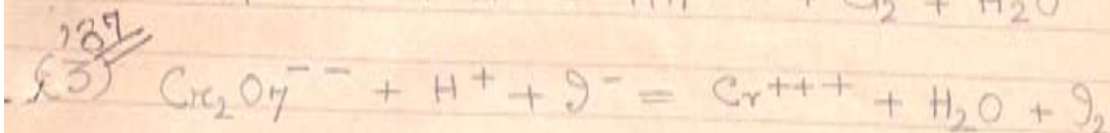
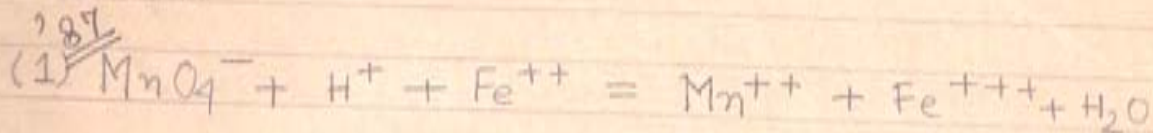




Equation Balancing

Q. Balance the following reactions by ion electron method.



(1) 1 case

Oxidant

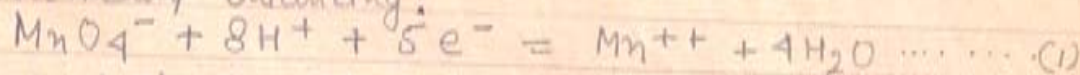
(a) Skeleton



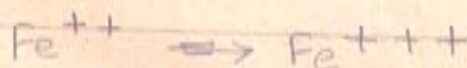
(b) Atomically balancing



(c) Electrically balancing:



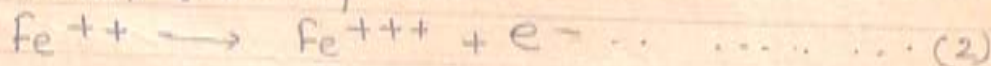
for reductant: (a) skeleton:



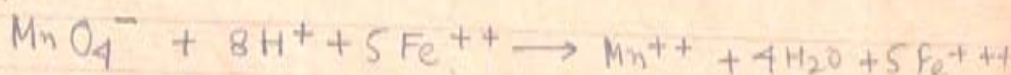
(b) Atomically balancing.



(c) Electrically balancing



Now multiplying Eq. (2) by 5 and adding with Eq. no (1)
we get:



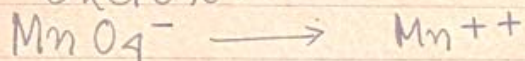
N.B. Eq. wt of $KMnO_4$ considering electron method is $\frac{\text{molecular wt of } KMnO_4}{\text{No of electron involved}} = \frac{\text{Mol. wt of } KMnO_4}{5}$



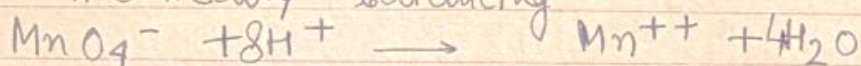
Equation Balancing

(2) for Oxidant

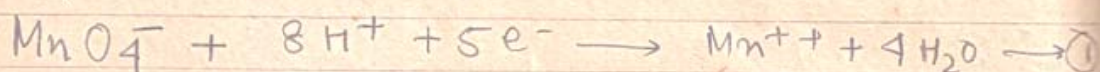
(a) Skeleton:



(b) Atomically balancing

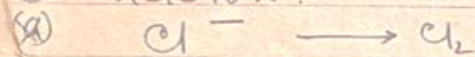


(c) Electrically balancing

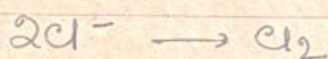


For reductend

(a) Skeleton:



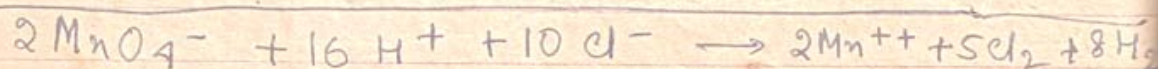
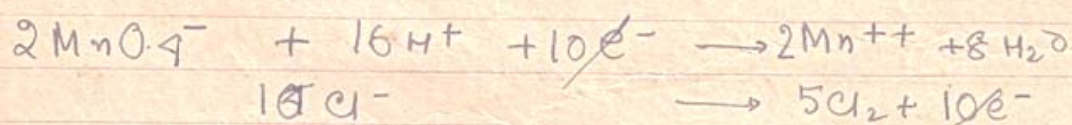
(b) Atomically balancing



(c) Electrically balancing

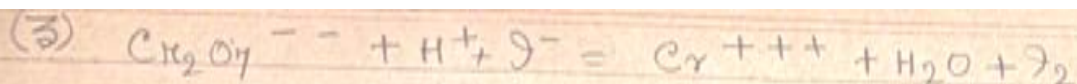


Multiplying the eqⁿ no (2) by 5 and the eqⁿ (1) by 2



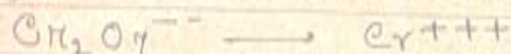


Equation Balancing

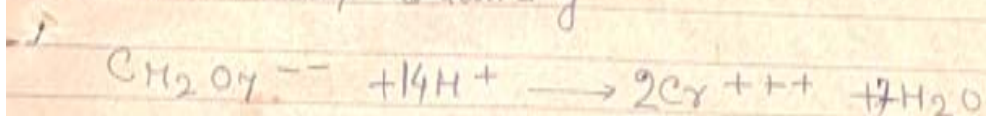


for Oxidant

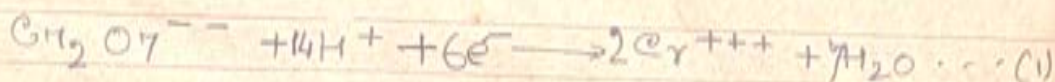
(a) Skeleton



(b) Atomically balancing

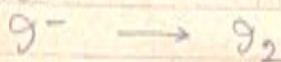


(c) Electrically balancing

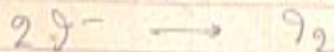


for reductant

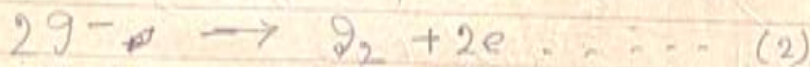
(a) Skeleton



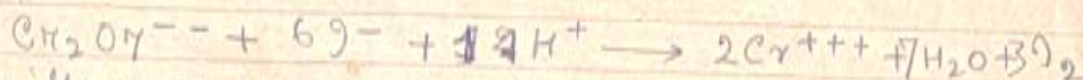
(b) atomically balancing



(c) Electrically balancing



2. Multiplying the eqn ^{no} (2) by 3 and adding with eqⁿ (1)



Here the eq. wt of

N.B $\text{K}_2\text{Cr}_2\text{O}_7$ is

Mol. wt of $\text{K}_2\text{Cr}_2\text{O}_7$	Mol. wt of $\text{K}_2\text{Cr}_2\text{O}_7$
No. of electron involved	2