

07

007-358 WK 2

JANUARY

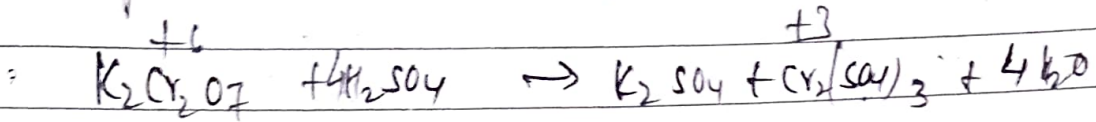
FRIDAY

7

Oxidising property of $K_2Cr_2O_7$

JANUARY							11
S	M	T	W	T	F	S	WK
30	31					1	1
2	3	4	5	6	7	8	2
9	10	11	12	13	14	15	3
16	17	18	19	20	21	22	4
23	24	25	26	27	28	29	5

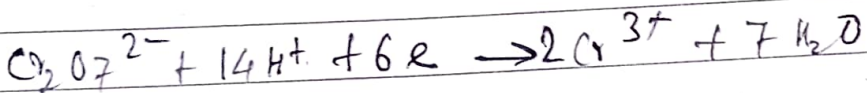
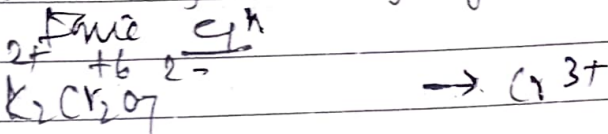
$K_2Cr_2O_7$ acts as a strong oxidising agent in ~~an~~ acidic medium.



+ 3 [O]

Abscent oxygen

Due to the formation of nascent oxygen, $K_2Cr_2O_7$ acts as a strong oxidising agent.



Oxidising agent \rightarrow decrease in O.N.
 \rightarrow gain of electron

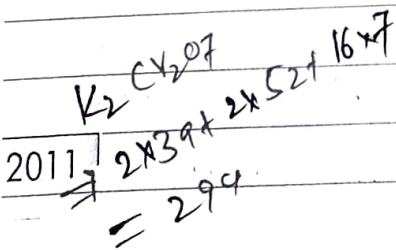
Equivalent weight of $K_2Cr_2O_7$ in acidic medium:

$$Eq \text{ wt of an O.A.} = \frac{\text{Mol wt}}{\text{Total decrease in O.N. per molecule}}$$

\therefore Eq wt of $K_2Cr_2O_7$ in acidic medium

$$= \frac{\text{Mol wt}}{\text{Total decrease in O.N. per molecule}}$$

$$= \frac{294}{3 \times 2} = \frac{294}{6} = 49$$

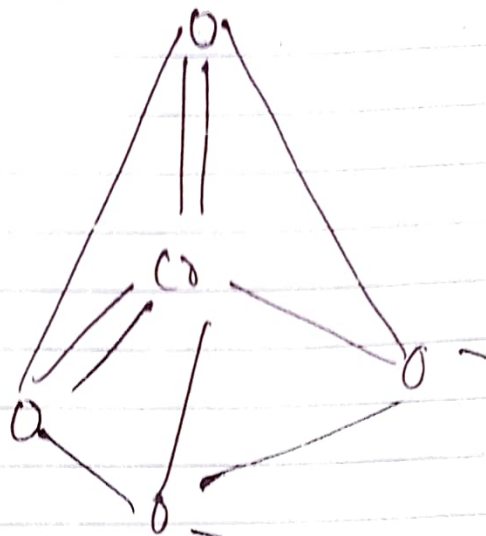


2011

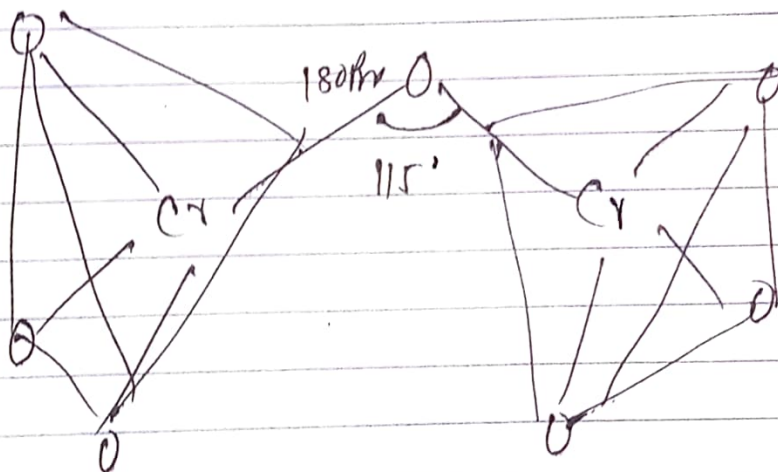
Structure of chromate and dichromate

Con:

CrO_4^{2-} ion \rightarrow It has tetrahedral structure



The dichromate ion ($Cr_2O_7^{2-}$) has two tetrahedra linked through Cr-O bonds.



SUNDAY 9

Uses of Potassium dichromate:

- (1) In dyeing and calico printing.
- (2) - In chrome tanning.