

FEBRUARY							'11
WK	M	T	W	T	F	S	S
6		1	2	3	4	5	6
7	7	8	9	10	11	12	13
8	14	15	16	17	18	19	20
9	21	22	23	24	25	26	27
10	28						

Potassium Permanganate

JANUARY

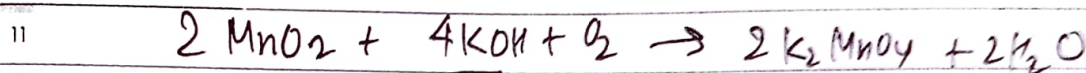
TUESDAY

11

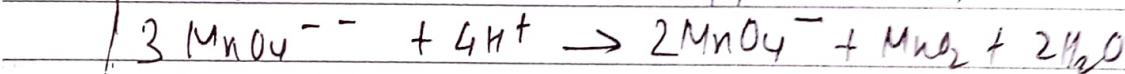
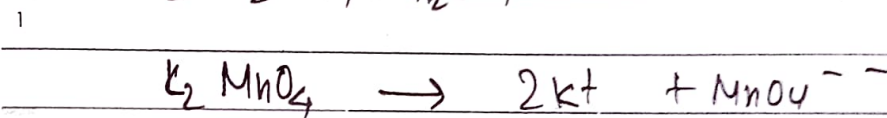
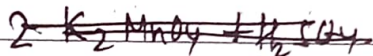
NR 3 10 1 35A

KMnO₄

8 It is prepared by fusing MnO₂ with an alkali
 9 metal hydroxide and an oxidising agent like
 10 KNO₃. This produces the dark green K₂MnO₄
 which disproportionates in a neutral or acidic solution
 to give permanganate

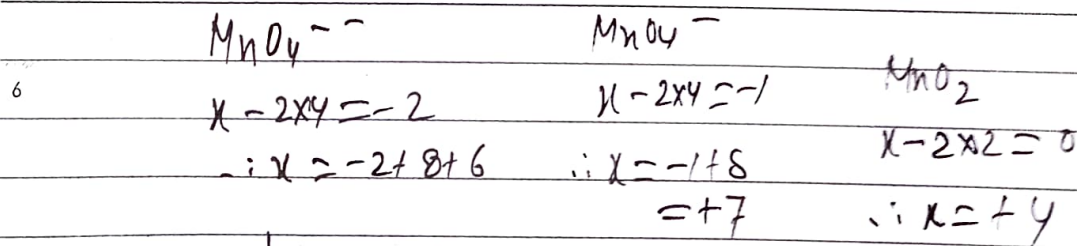


Potassium
manganate



3 Manganate ion Manganate ion

4 Disproportionation: It is a chemical process
 5 in which same substance is both oxidised and
 reduced



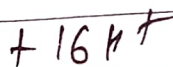
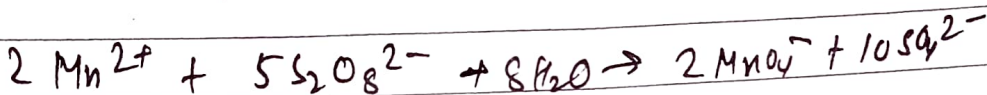
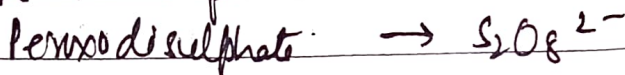
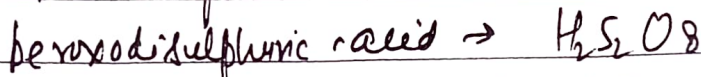
Oxidation \rightarrow Increase in O.N.
 Reduction \rightarrow Decrease in O.N.

In the laboratory, KMnO₄ is prepared

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

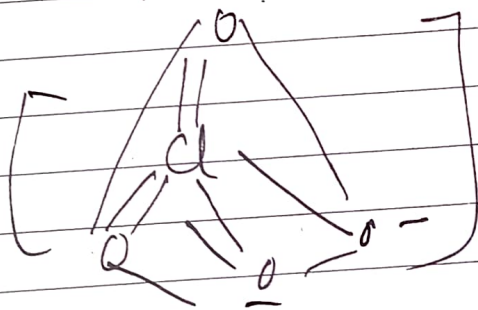
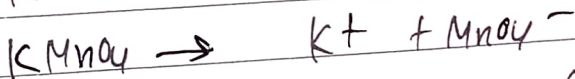
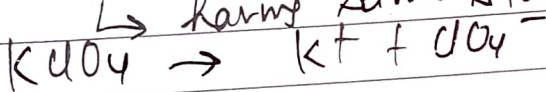
(012-353) WK 3

By the oxidation of Mn^{2+} ion with peroxodisulphate:

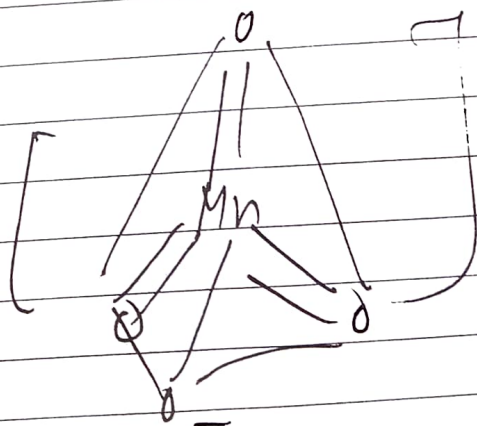
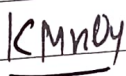


Properties: It is dark purple crystals which are isostructural with $KClO_4$.

↳ having same structure



Tetrahedral



Tetrahedral