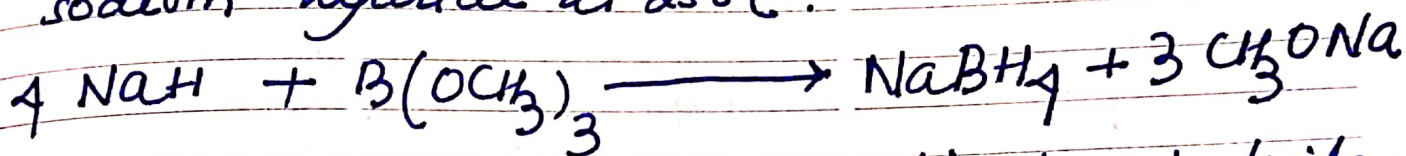


③

Sodium Borohydride (NaBH_4)

Preparation

Sodium Borohydride is a selective reducing agent. It was first prepared by Schlesinger and Brown et al., by the reaction of methyl borate and sodium hydride at 250°C .



Sodium borohydride.

17 Sunday

Applications

It is milder, but more selective reducing agent than that of LiAlH_4 . It can be used in reducing carbonyl group at moderate temp. without affecting the other reducible group like esters, epoxides, nitro, nitrile, carboxylic acid and their salt present in it.

Unlike LiAlH_4 , it can be used in hydroxylating solvent like alcohol and water, therefore it is widely used in reducing carbonyl in aqueous solution.

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

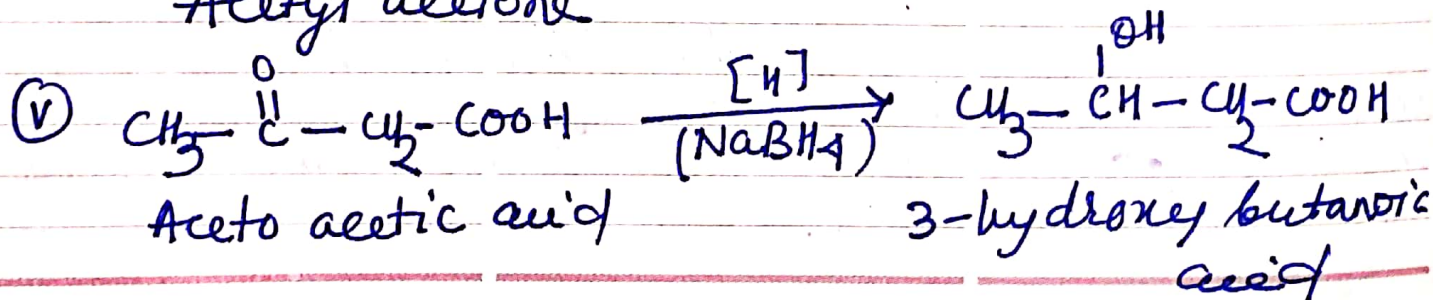
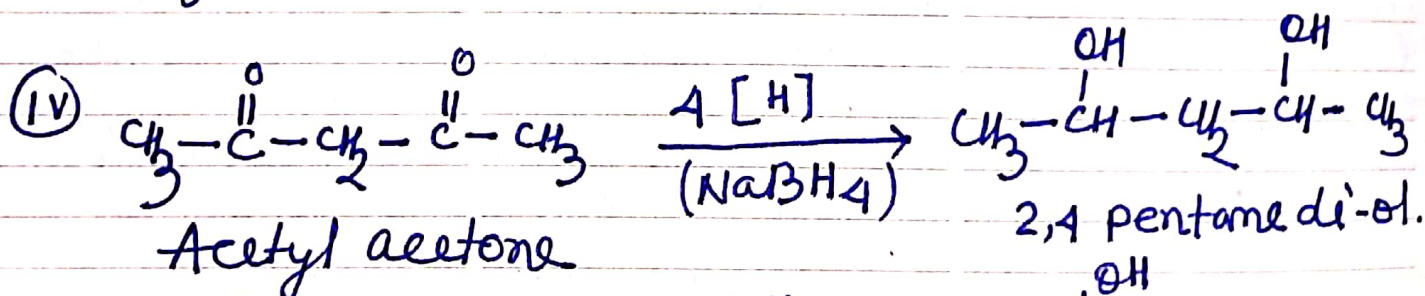
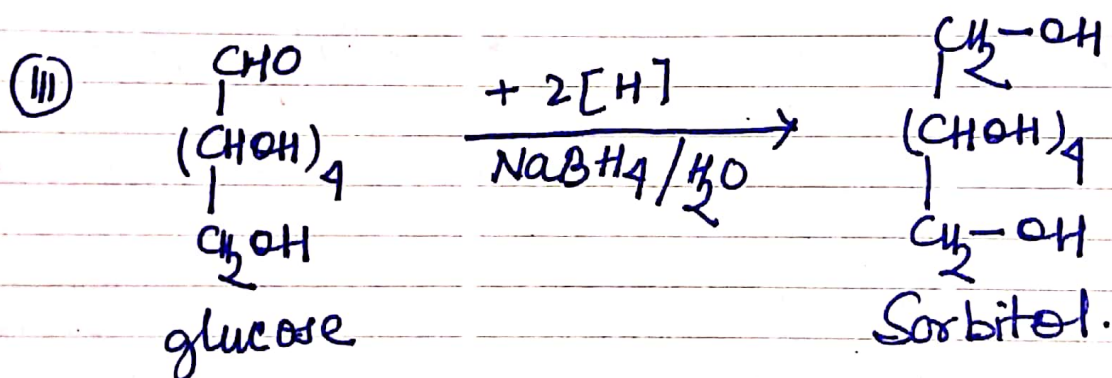
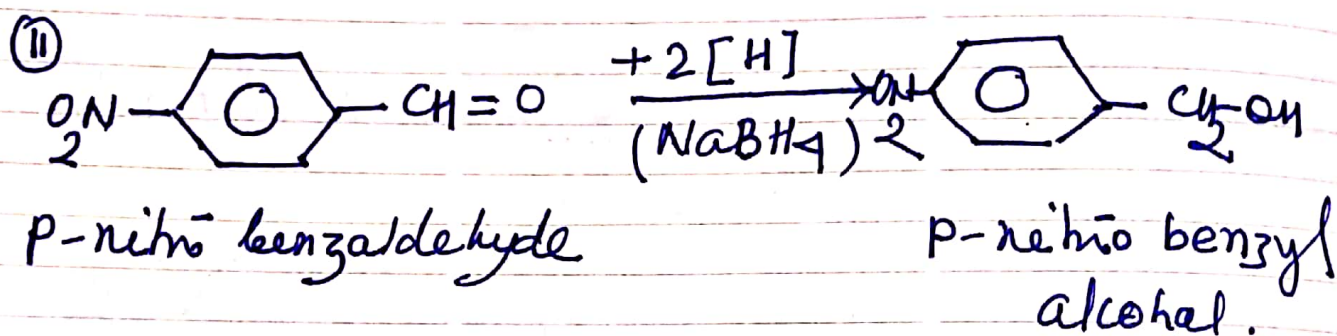
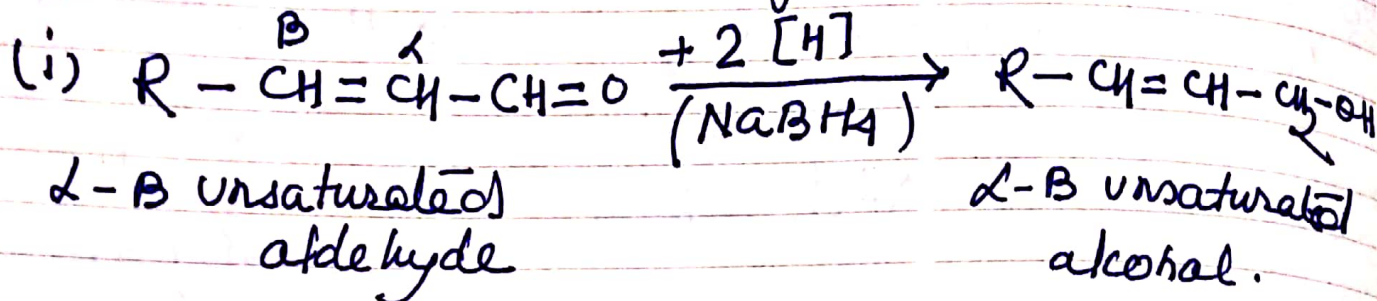
April 2016

18 Monday

19 Tuesday

20 Wednesday

(I) In reduction of carbonyl compound.



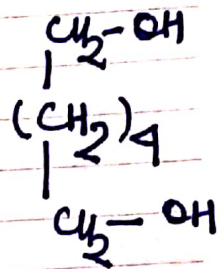
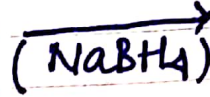
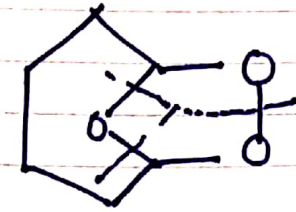
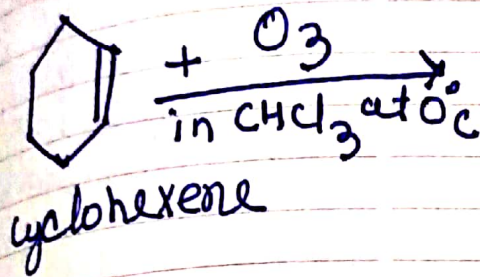
April 2016

21 Thursday

22 Friday

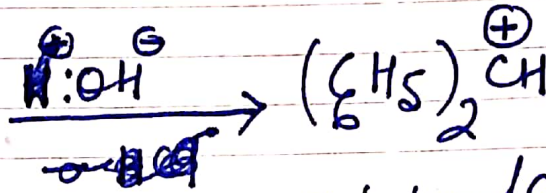
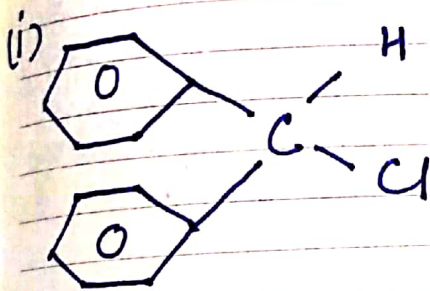
23 Saturday

② Reduction of Ozonides into alcohol.

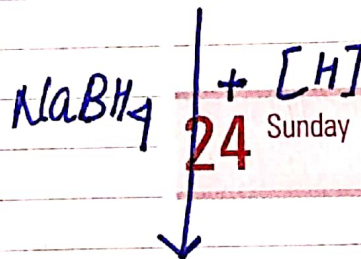


1,6 hexanediol

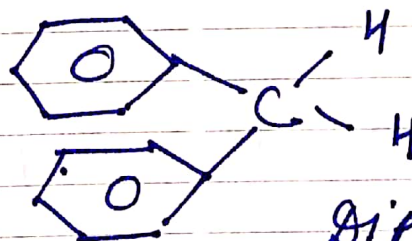
③ Reduction of halides, azides and diazonium borofluorides.



Diphenyl carbocation

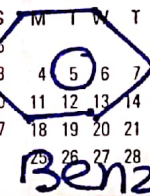
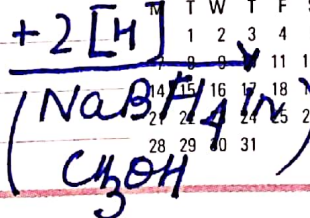
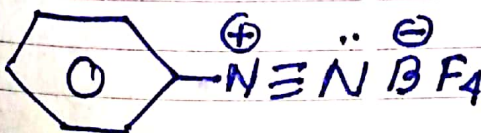


24 Sunday



Diphenyl methane

(ii)



MARCH

APRIL

MAY

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