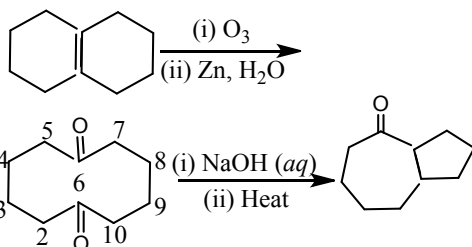


Topic :- Aldehydes, Ketones & Carboxylic Acids

3

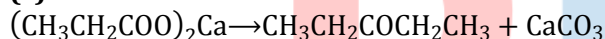
(a)



For aldol condensation C-5 and C-7 can attack to C-1 similarly C-2 and C-10 can attack to C-6 but all give same product.

4

(c)



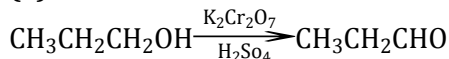
6

(d)

Aldehyde containing no α -H-atom on reaction with 50% NaOH or KOH, undergo disproportionation to give an alcohol and Na or K salt of an acid. This reaction is called Cannizzaro reaction. Acetaldehyde does not show Cannizzaro reaction due to presence of α -hydrogen atom

7

(a)



1. (B)

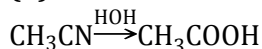
propanol propanal



(C)

8

(b)



12

(c)

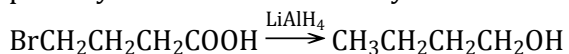
40% aqueous solution of formaldehyde (methanal) is called as formalin.

Note Formalin used as disinfectant and preservative for biological specimens.

13

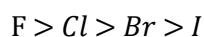
(a)

LiAlH_4 is a strong reducing agent, which reduces carboxylic acids to corresponding primary alcohols as well as alkyl halide to alkenes, but donot reduce double bond



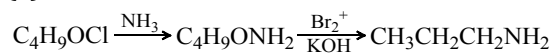
14 **(d)**

The strength of carboxylic acid depends upon the nature of the electron withdrawing halogen atom. Greater the electron withdrawing influence of the halogen atom stronger will be the acid. The electron withdrawing effect of the halogen decreases as



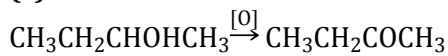
Hence, $\text{CH}_2(\text{I}).\text{COOH}$ is the weakest acid among these.

15 **(c)**

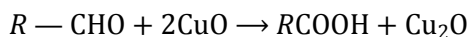


Thus, $\text{C}_4\text{H}_9\text{OCl}$ should be $\text{CH}_3\text{CH}_2\text{CH}_2\text{COCl}$.

16 **(c)**



20 **(d)**



PE

ANSWER-KEY										
Q.	1	2	3	4	5	6	7	8	9	10
A.	A	A	A	C	C	D	A	B	A	B
Q.	11	12	13	14	15	16	17	18	19	20
A.	D	C	A	D	C	C	C	C	B	D

PE