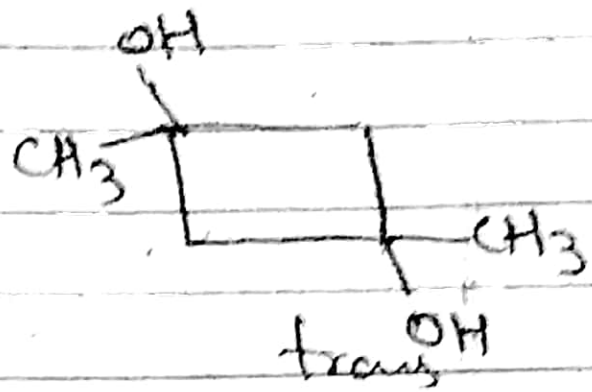
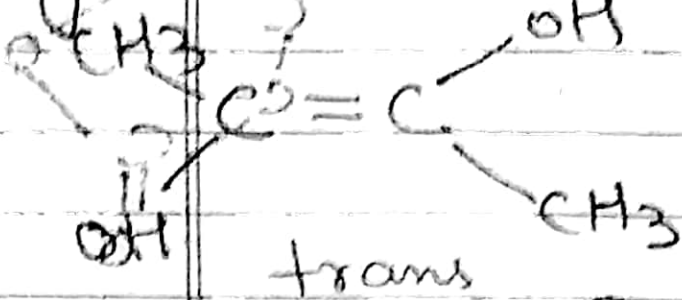
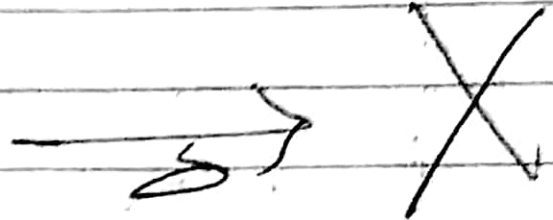
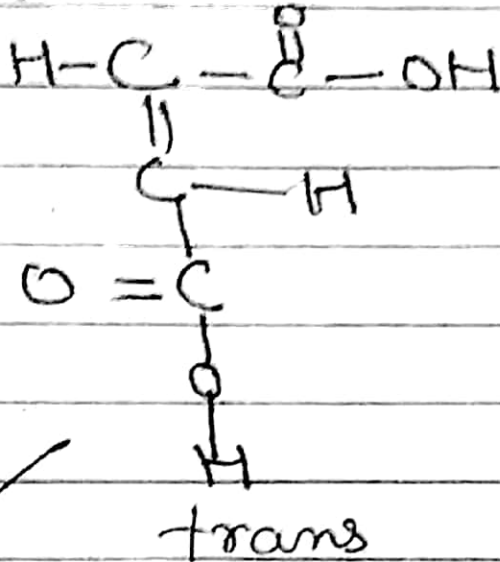


eg:-



ech:-



no anhydride

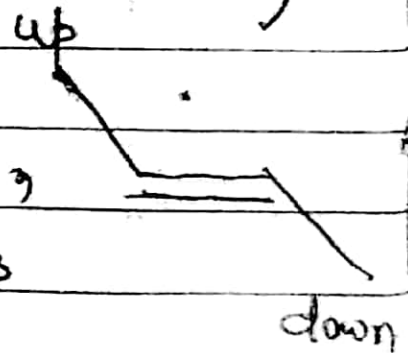
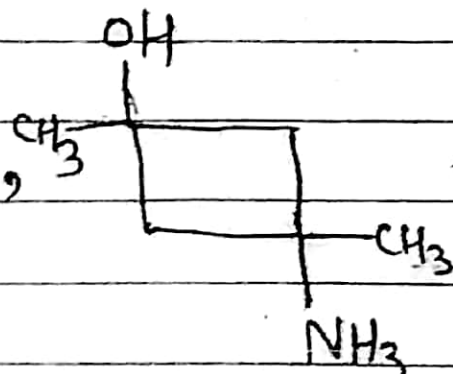
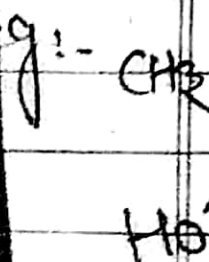
* E, Z isomerism:-

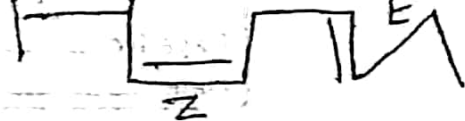
E form - (Entgegen) (opposite)

- When diagonal atoms or group are same then called E form

→ It show similar character to trans

In E form ~~the~~ direction of bond with respect to double bond are different (one up other down)





- When diagonal atom or group are same hence symmetrical (mirror image), ~~hence~~ non-polar, reactive and having less dipole moment as well as unreactive nature than ~~cis isomer~~ (Z-form)

- It having more melting point, boiling point and stability than cis isomer. (Z-form)

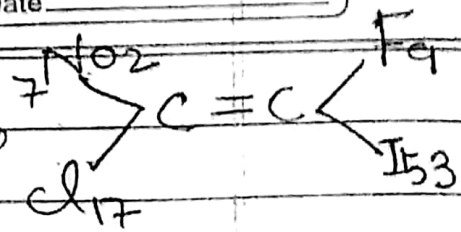
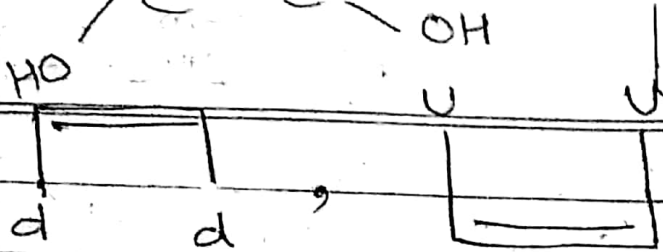
- Trans 1,2-dicarboxylic acid doesn't form anhydride after loss of water due to stability nature of trans but cis isomer can make anhydride due to reactive ~~stable~~ nature.

Z form - (Zusammen) (together)

- When diagonal atoms or group are different (called Z form - (cis form))

In E form when direction of bond with respect to double bond are same (either upward or downward with respect to double bond)

eg:-



eg:-

Note:-

- It having less melting point, b. p and stability than trans isomer

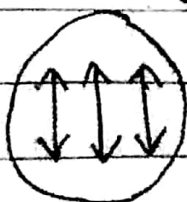
- Cis-1,2-dicarboxylic acid form anhydride after loss of water due to reactive nature of cis isomer can make to stable nature. But trans isomer can not make.

* Optical Isomerism

- When compd. rotates on passing plane polarised light through it

- When compound rotate clockwise then called dextro or d-form or positive form

- When compd. rotates anticlockwise then called leavo or l-form or negative form.

N.B →

P.P.L ✓



P.P.L X