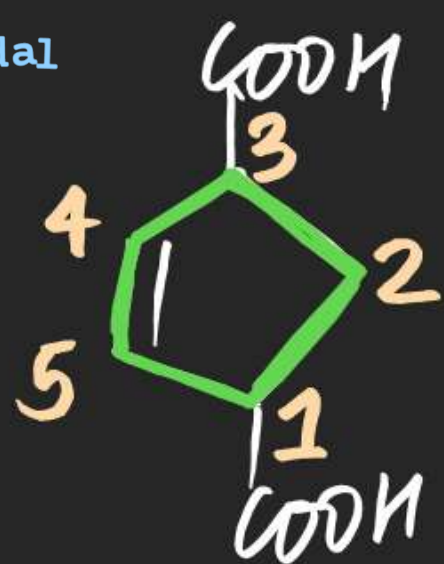
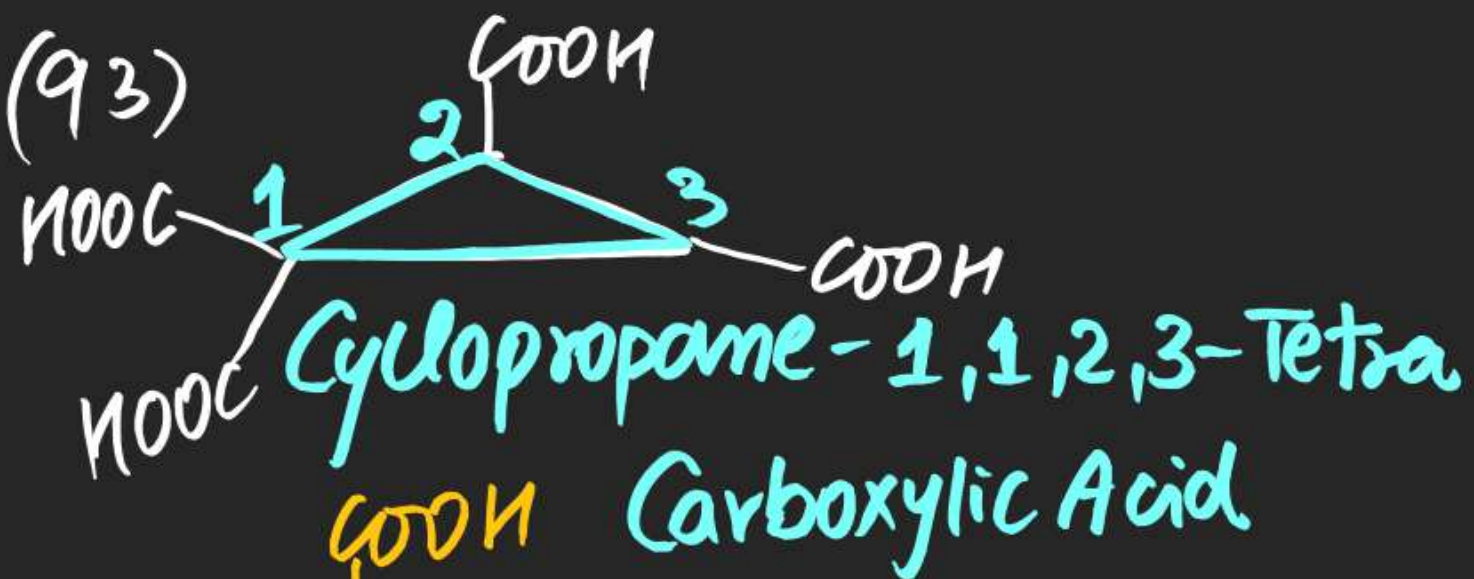


(90)



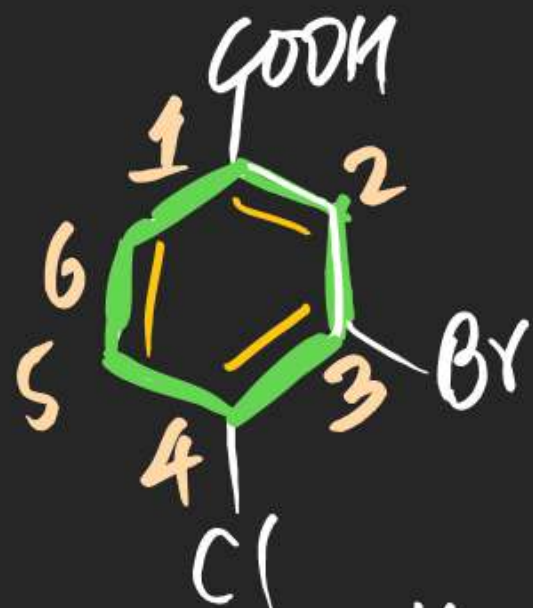
Cyclopent-4-ene
-1,3-Dicarboxylic Acid

(93)



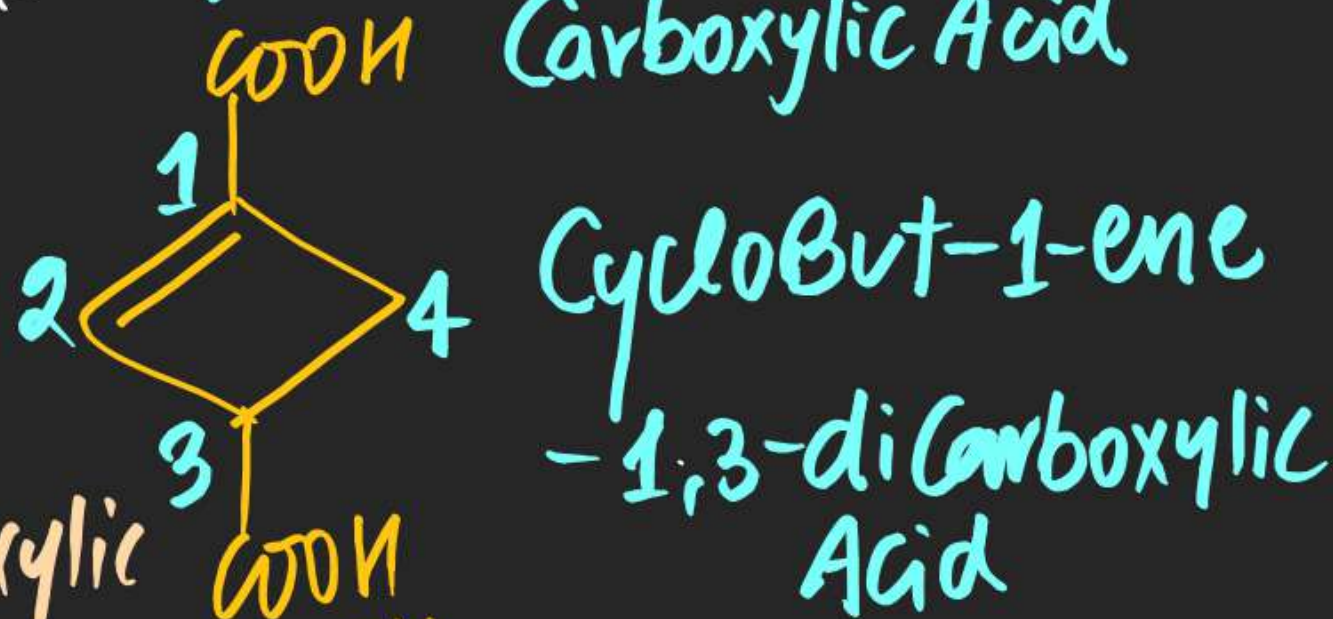
Cyclopropane-1,1,2,3-Tetra
Carboxylic Acid

(91)



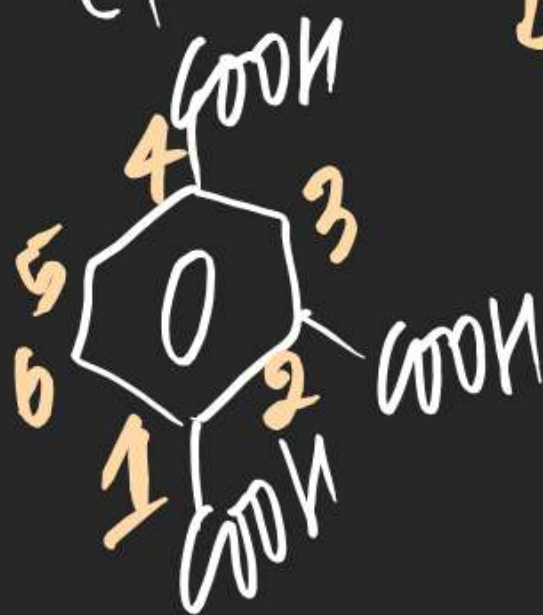
3-Bromo-4-chloro
Benzene Carboxylic Acid

(94)



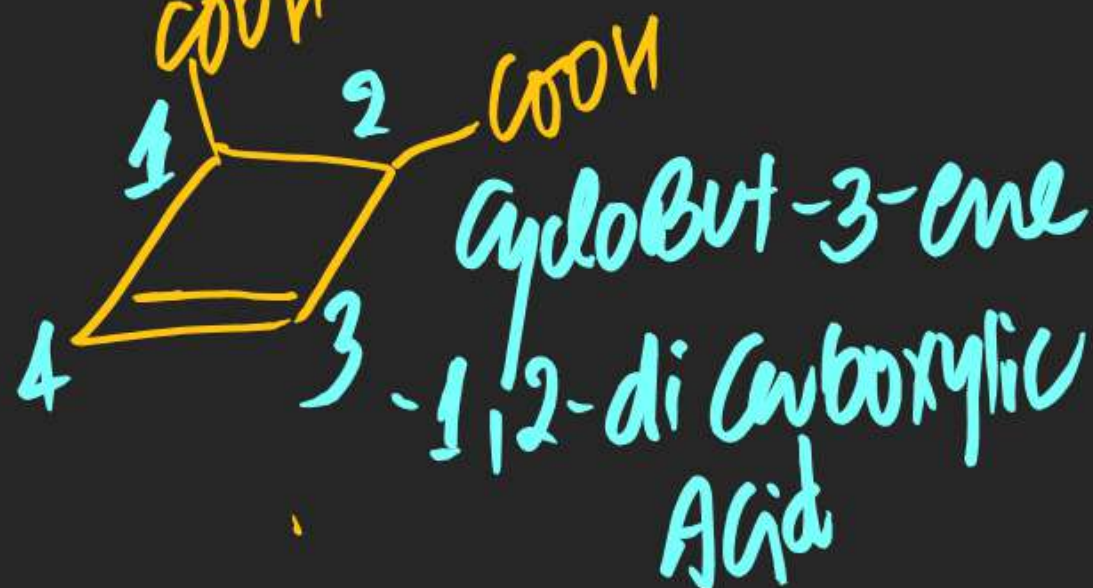
Cyclobut-1-ene
-1,3-dicarboxylic
Acid

(92)



Benzene-1,2,4-Tri Carboxylic
Acid

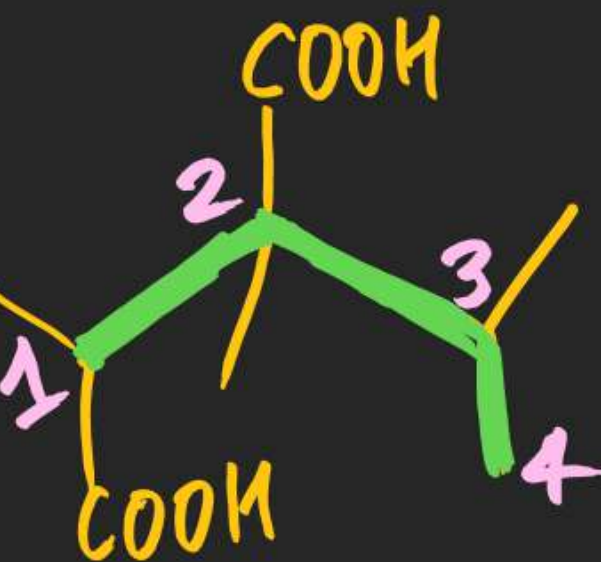
(95)



Cyclobut-3-ene
-1,2-dicarboxylic
Acid

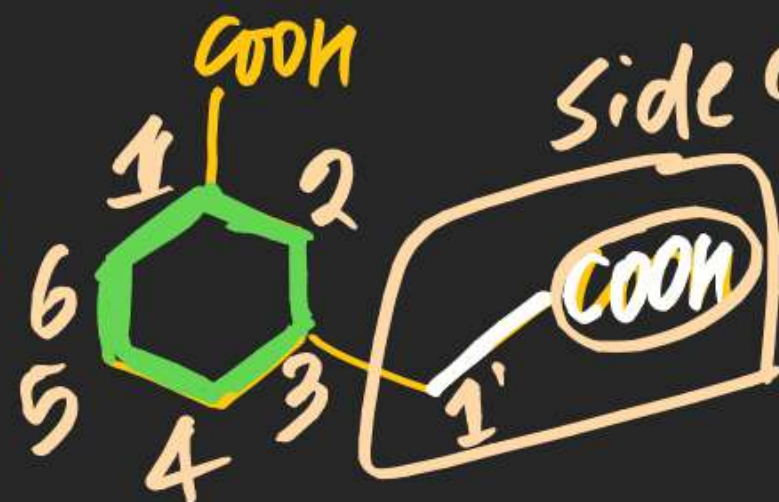
(98)

COOH



2,3-Dimethyl Butane-1,1,2-Tricarboxylic Acid

(99)

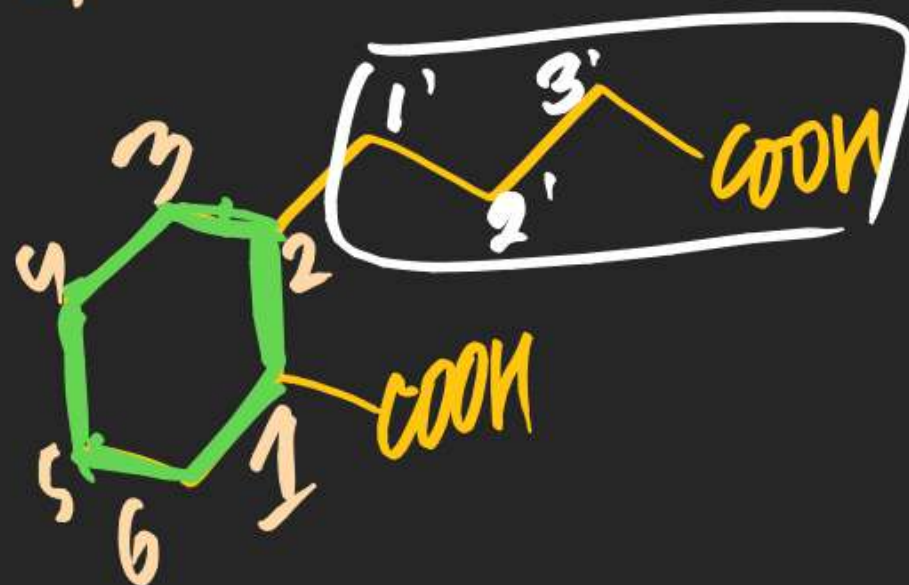


Side chain

3-Carboxymethyl Cyclohexane Carboxylic Acid.

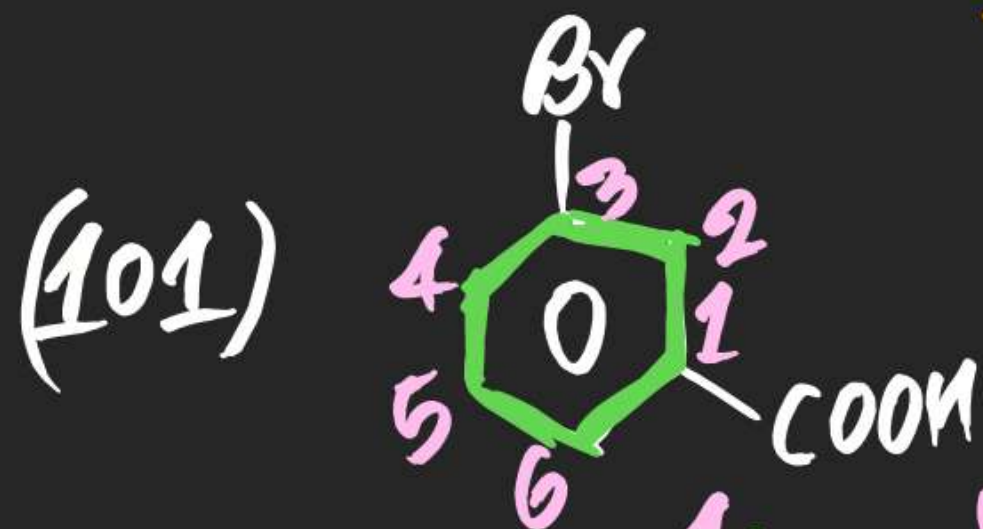
2-[3'-(carboxy Propyl)] Cyclohexane Carboxylic Acid.

(100)

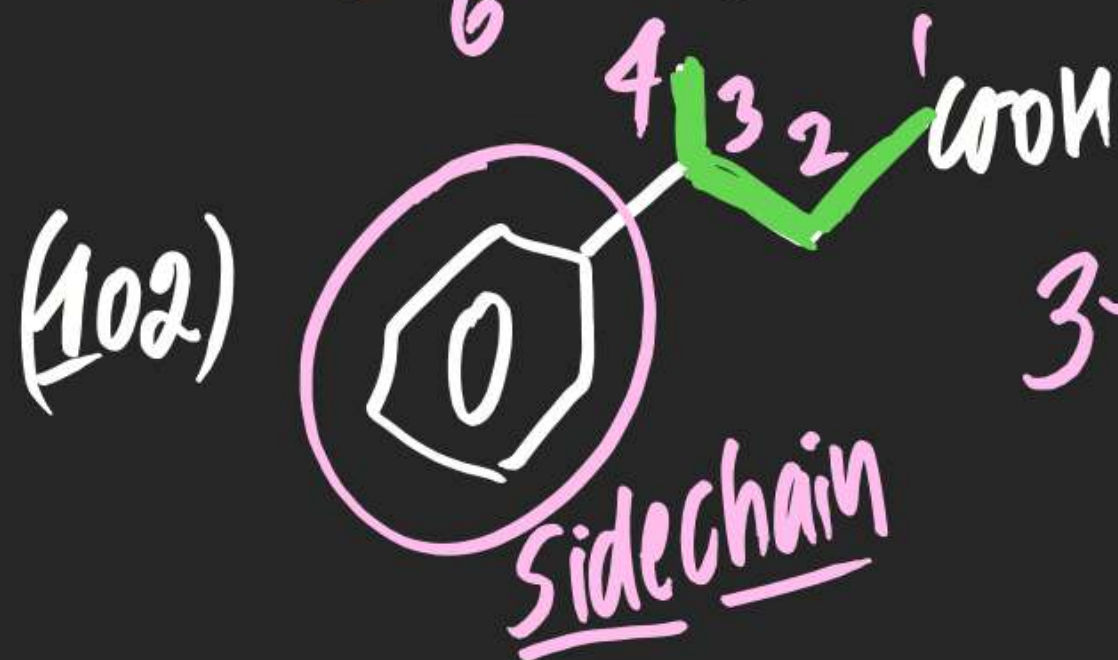


Note! Benzene Ring \Rightarrow Principal chain Benzene $[1^\circ \text{Prefix} + \text{W.R} + 1^\circ \text{Suffix}]$

\Rightarrow Side chain $\overset{2^\circ \text{Prefix}}{\downarrow}$ Phenyl (Ph)



3-Bromo Benzene Carboxylic Acid



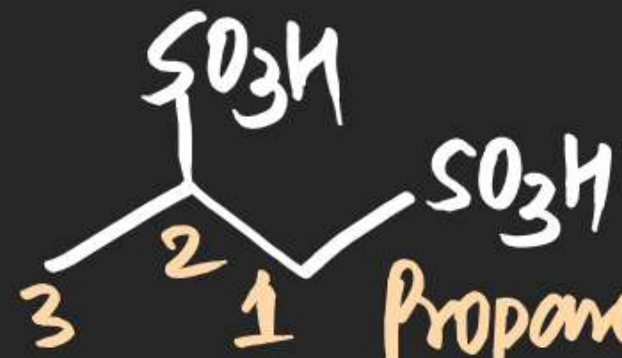
3-Phenyl Butanoic Acid

(#) Sulphonic Acid



Suffix
(Sulphonic Acid)

(107)



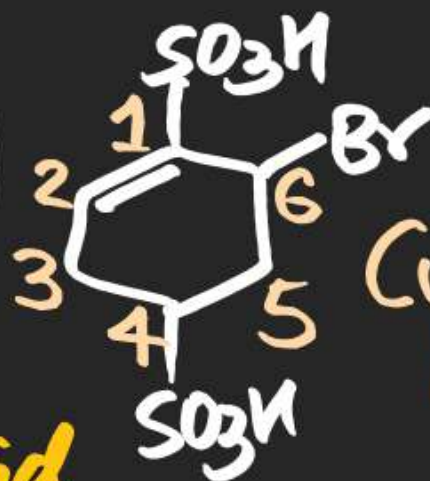
Propane-1,2-di
Sulphonic
Acid

(103)



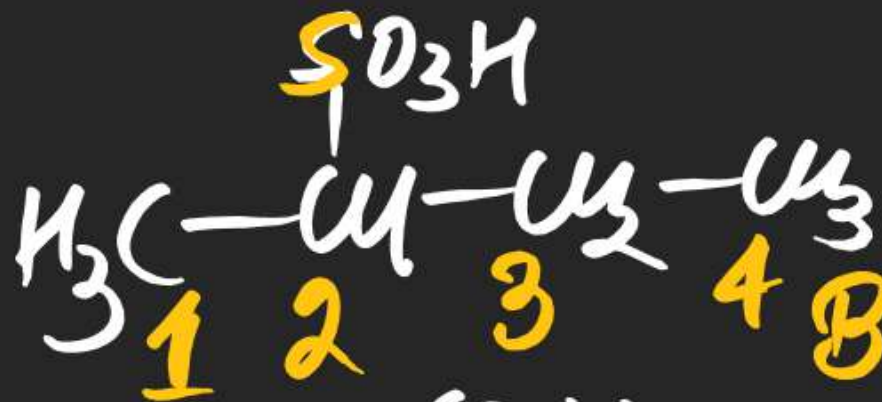
Ethane Sulphonic Acid

(108)



6-Bromo
Cyclohex-1-ene
1,4-di Sulphonic
Acid

(104)



Butane-2-Sulphonic Acid

(105)



2-methyl Cyclohexane Sulphonic Acid

(109)

3-Bromo Benzene
Sulphonic Acid

(106)

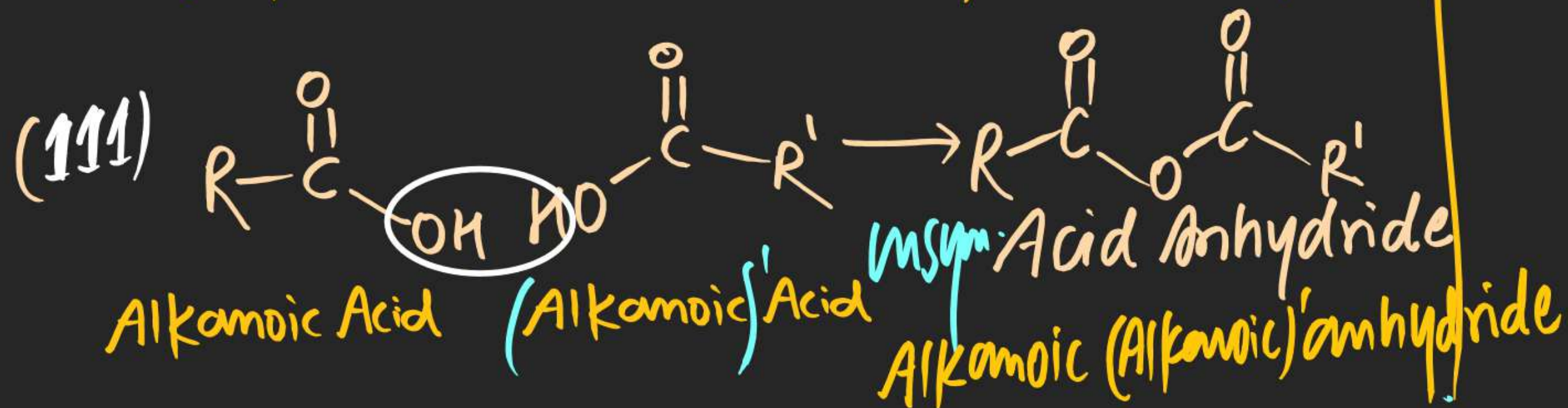
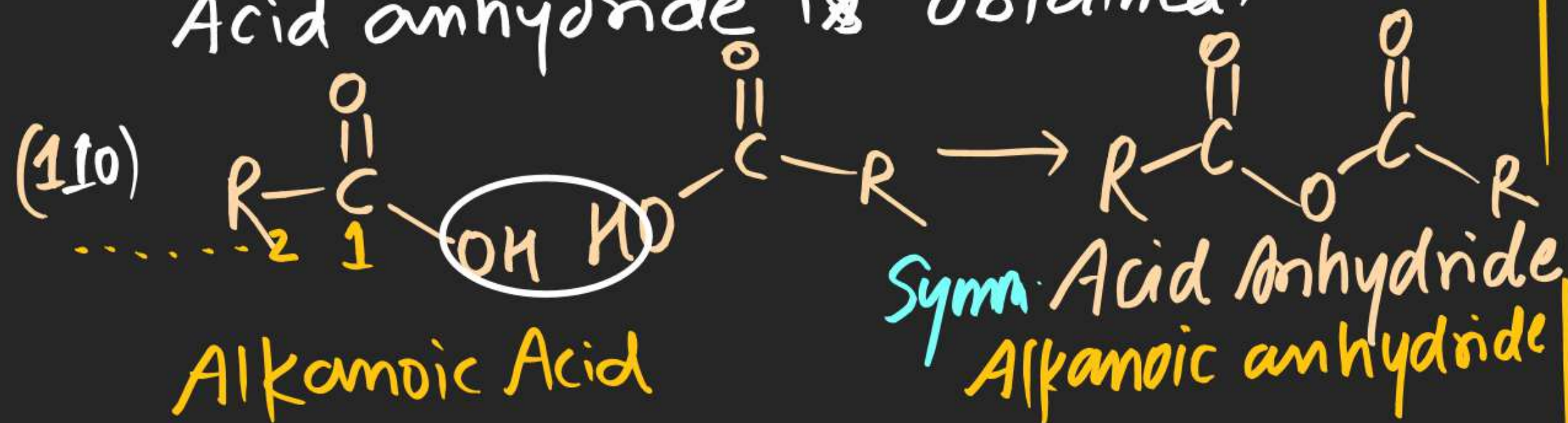


2-methyl Propane
1,2,3-Tri Sulphonic
Acid

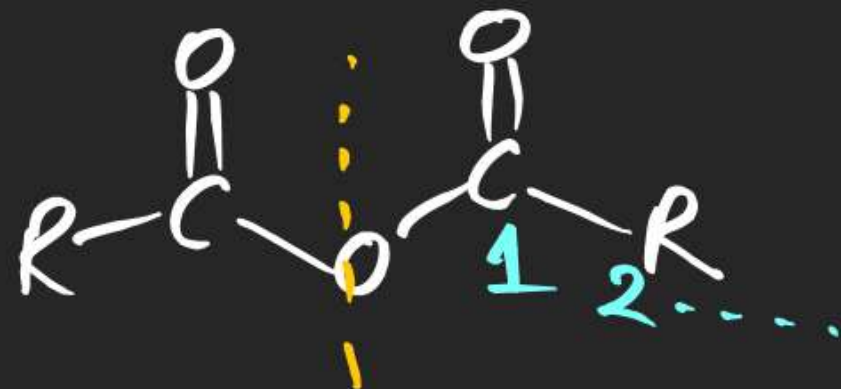


(#) Acid Anhydride:

⇒ when Acid gets dehydrated
Acid anhydride is obtained.

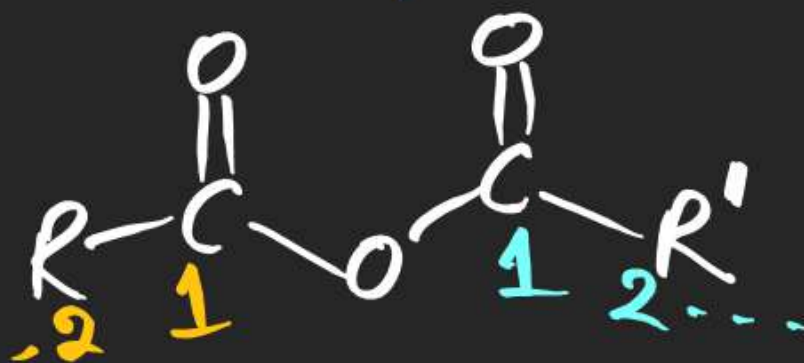


(112)



Alkanoic Anhydride
WR

(113)



(Alkanoic) (Alkanoic)' Anhydride

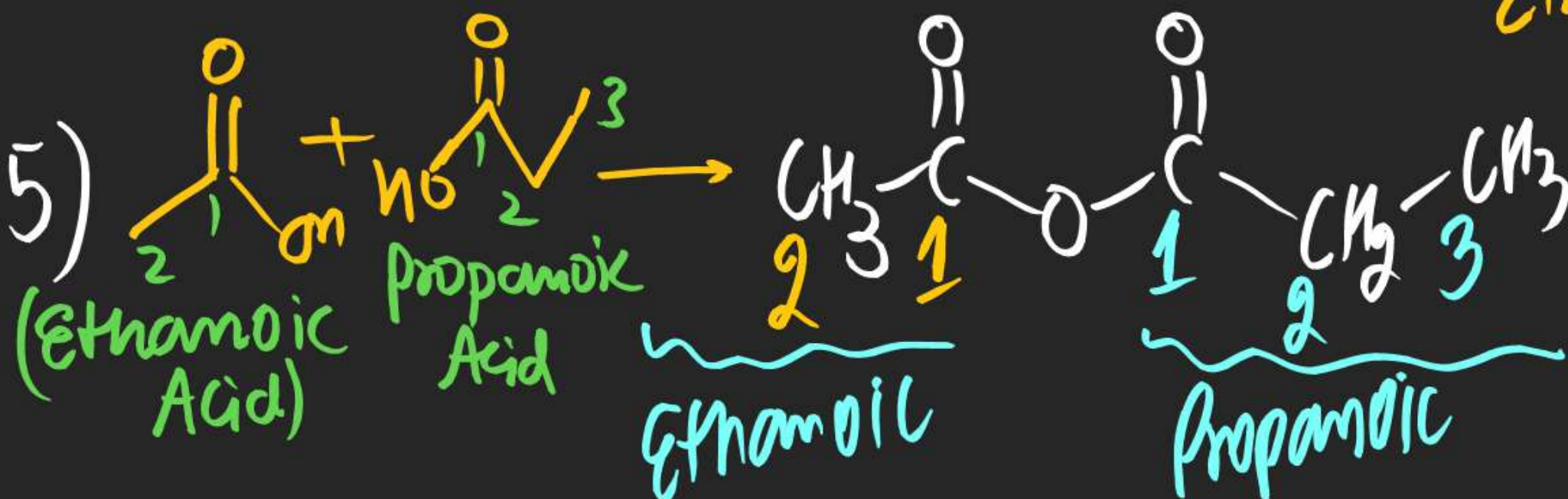
(114)



Ethanoic anhydride

Ethanoic Propanoic anhydride

(115)



(116)

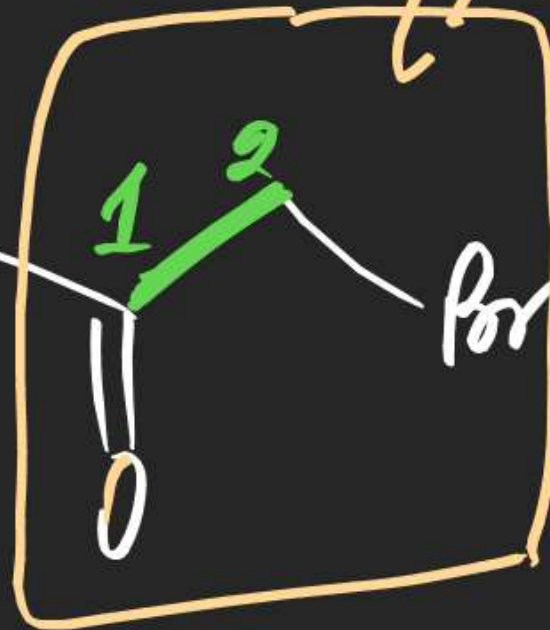
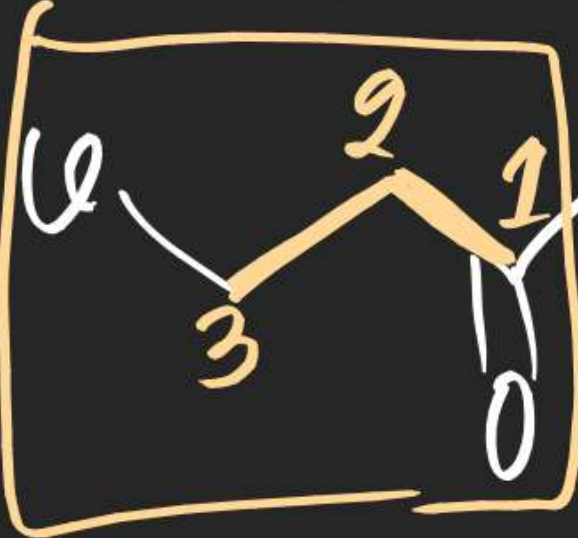


(117)



(118)

3-chloro



(2-Bromo Ethanoic)
(3-chloro Propanoic) anhydride

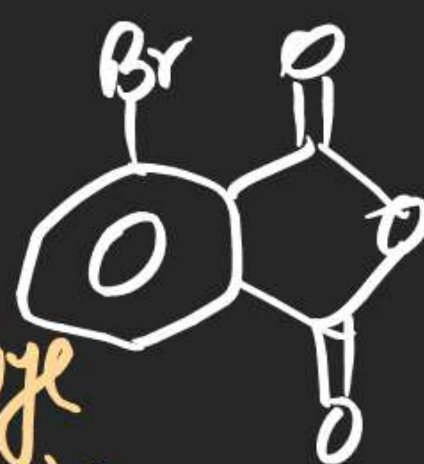
(119)



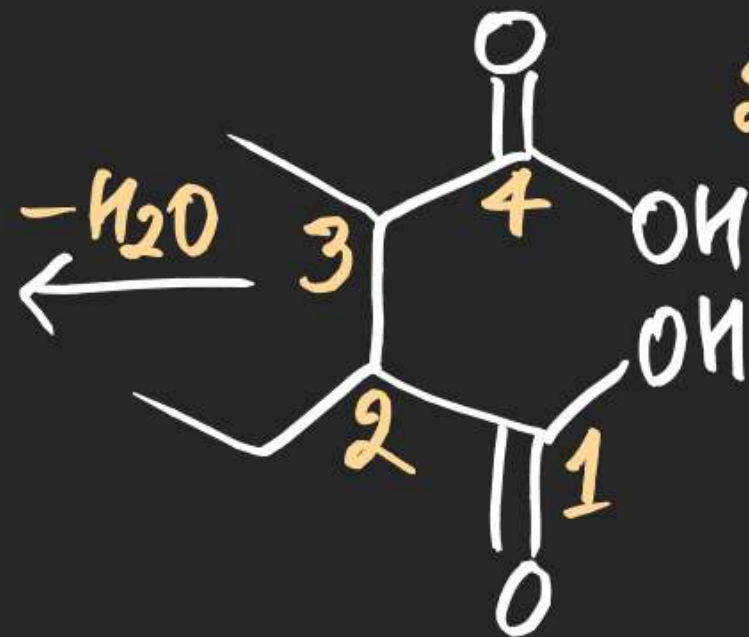
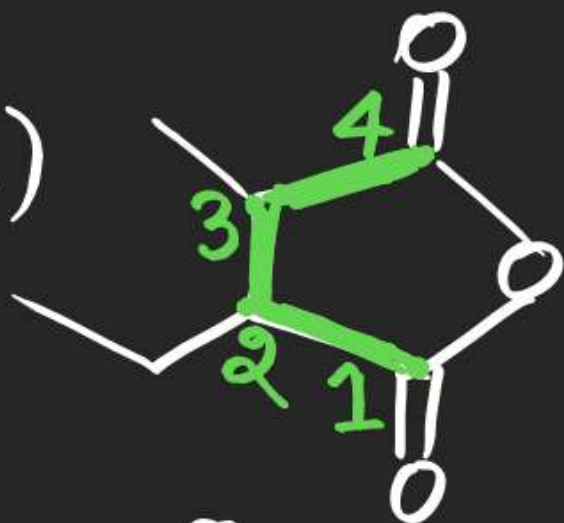
(120)



(124)

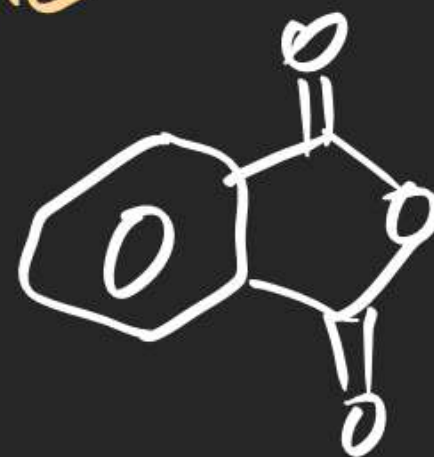


(121)



2-Ethyl-3-methyl
Butan-1,4-dioic
anhydride

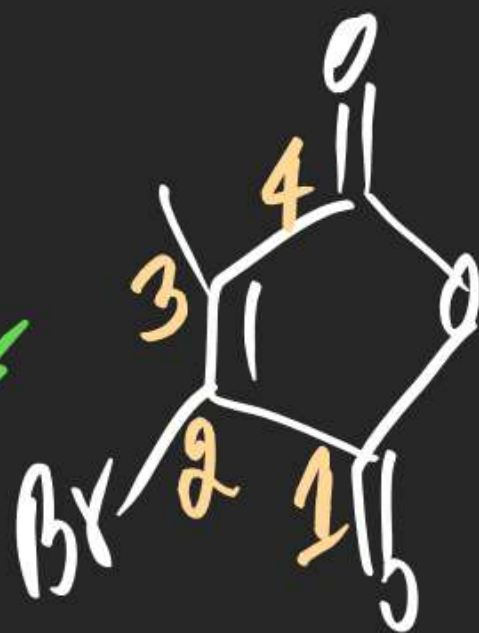
(125)



(122)

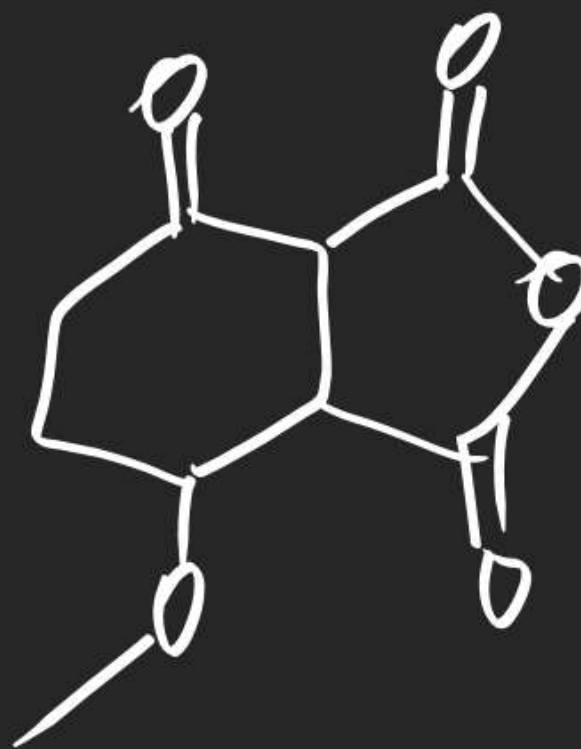


(123)

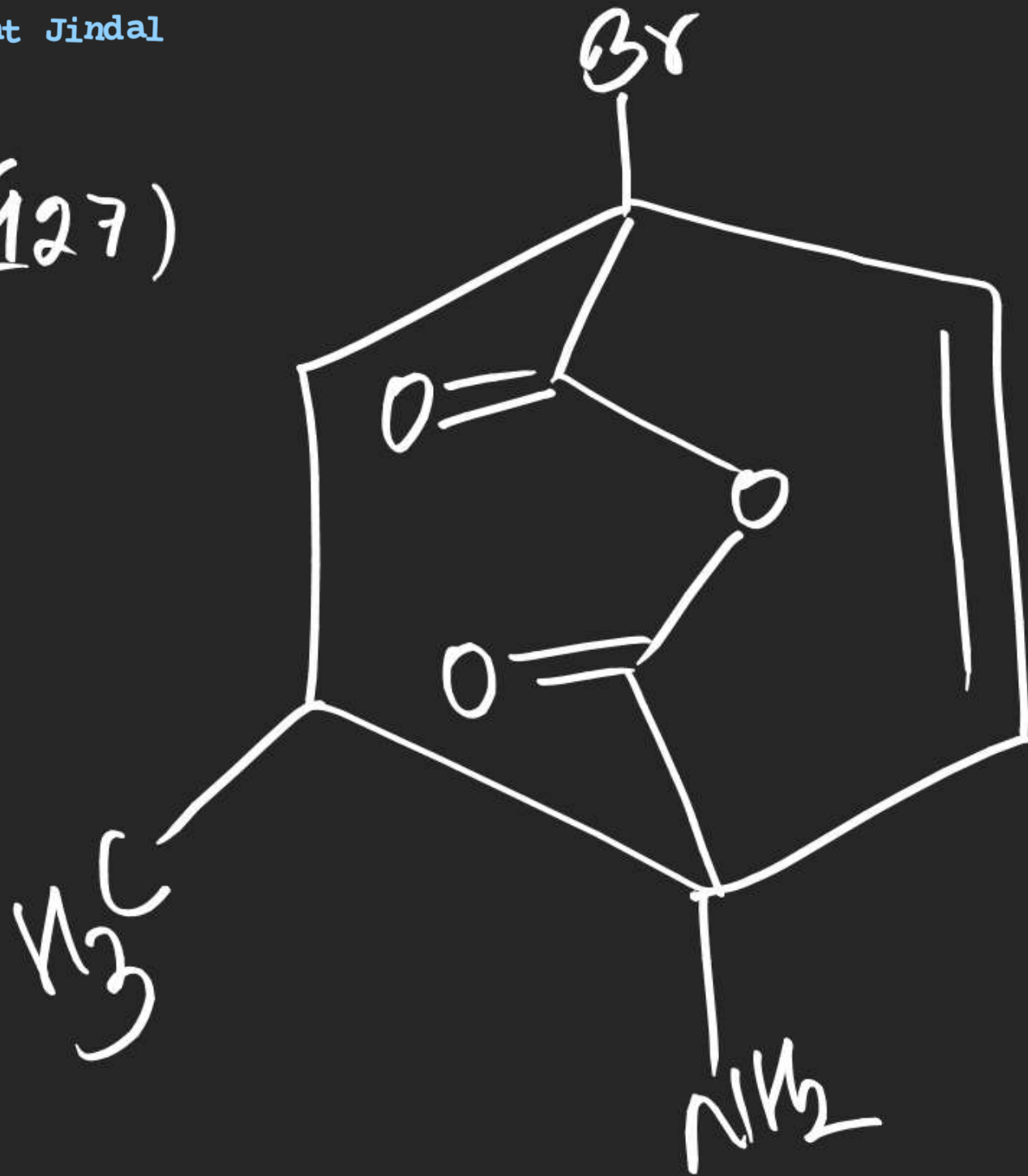


2-Bromo-3-methyl
But-2-enedioic
anhydride

(126)



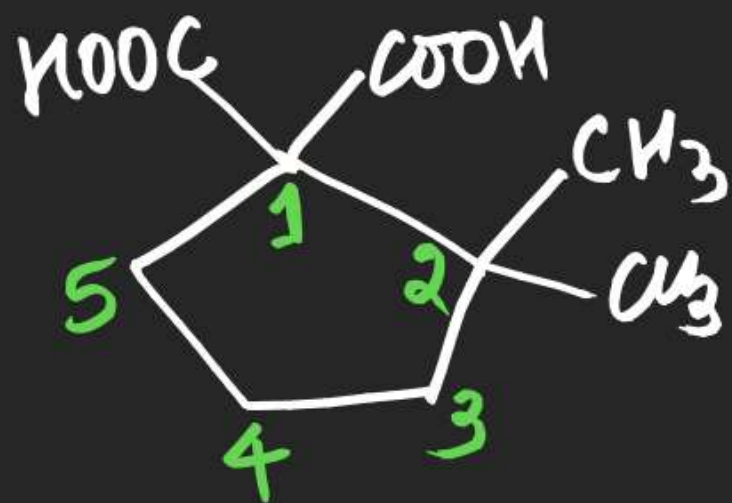
(127)



(128) Find $(x+y+z+w)_{\min} = ?$ for Compound with correct IUPAC name.

x, y -Di Methyl Cyclopentane- z, w -di Carboxylic Acid

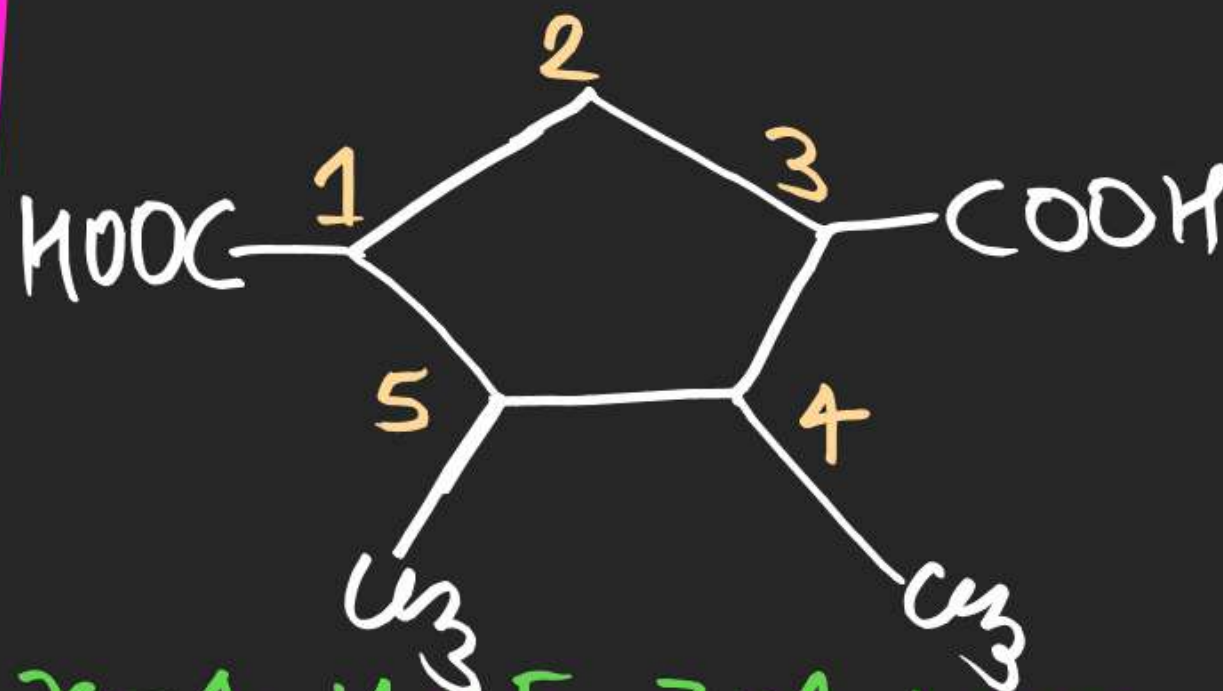
Soln:



$$x=2, y=2, z=1, w=1$$

$$\Rightarrow (x+y+z+w)_{\min} = 6$$

(129) Solve 128 for $(x+y+z+w)_{\max}$



$$x=4, y=5, z=1, w=3$$

$$(x+y+z+w)_{\max} = 13$$

(130) P-Bromo-Q-Chloro Cyclohex- γ -ene

(a) $(P+Q+R)_{\min} = ?$

(b) $(P+Q+R)_{\max} = ?$

(131) Find all compounds with IUPAC name
p-methyl-Q-chloro pent-R-yne

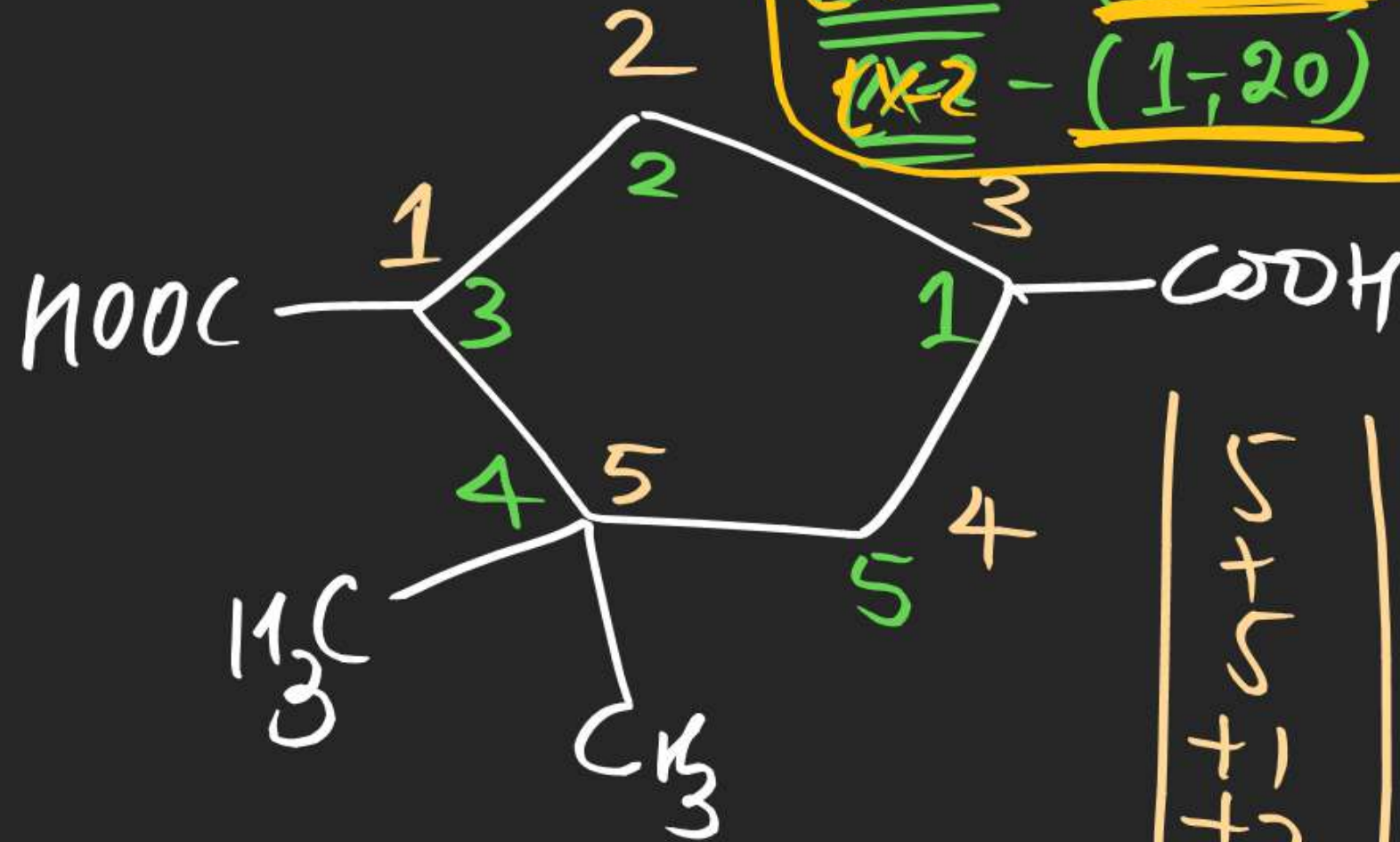
& also calculate $(P+Q+R)_{\min}$ & $(P+Q+R)_{\max}$.

NW

Nomenclature!
Sheet

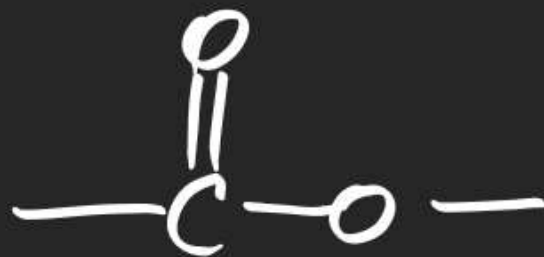
Ex-1 - (1-30)
Ex-2 - (1,20)

$$\begin{array}{r} 4 \\ +4 \\ +1 \\ +3 \\ \hline 12 \\ \hline \end{array}$$



$$\begin{array}{r} 5 \\ +5 \\ +1 \\ +3 \\ \hline 14 \end{array}$$

(#) Naming of Ester:-



Prefix

Suffix