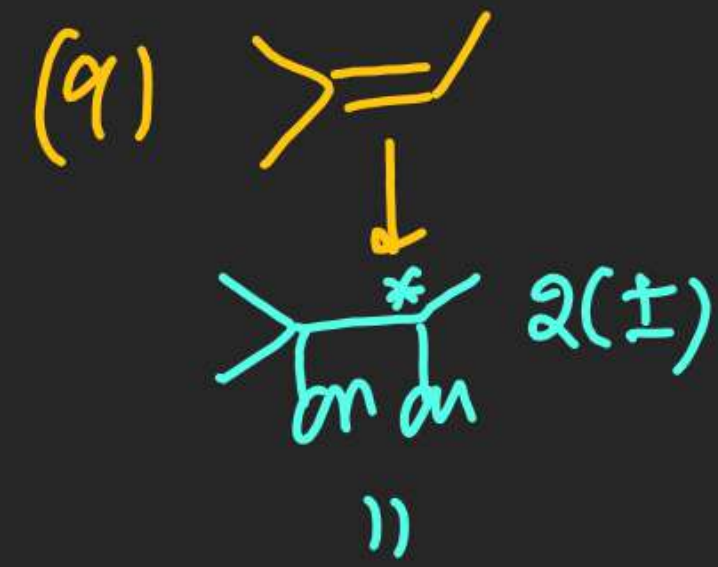




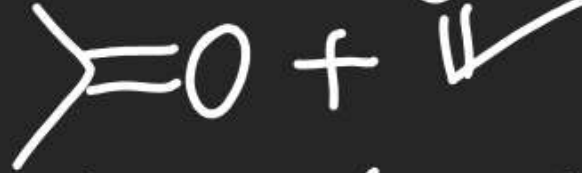
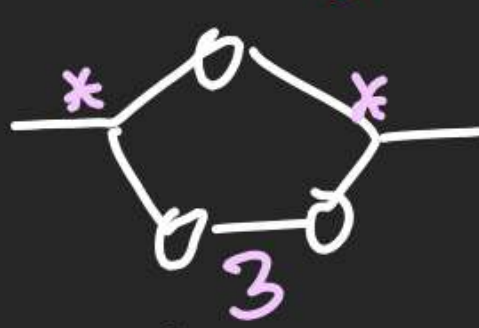
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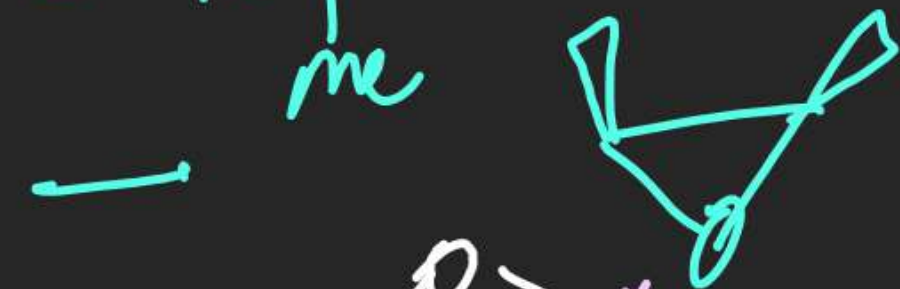
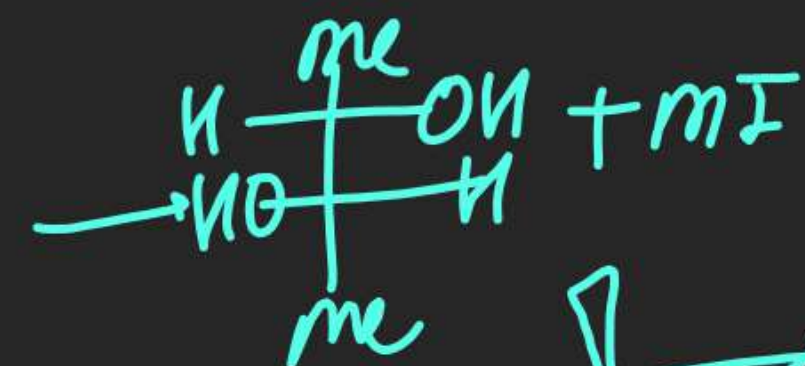
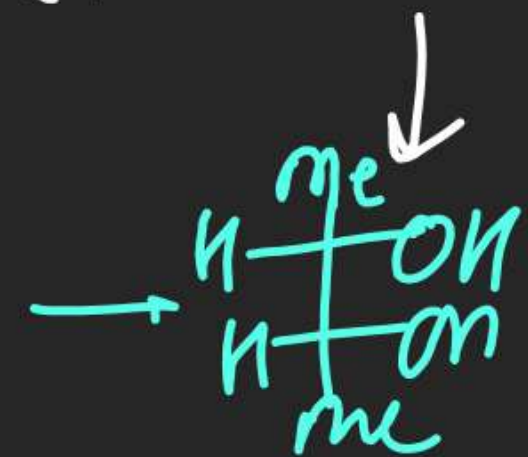
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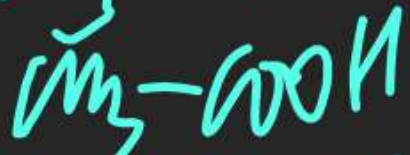
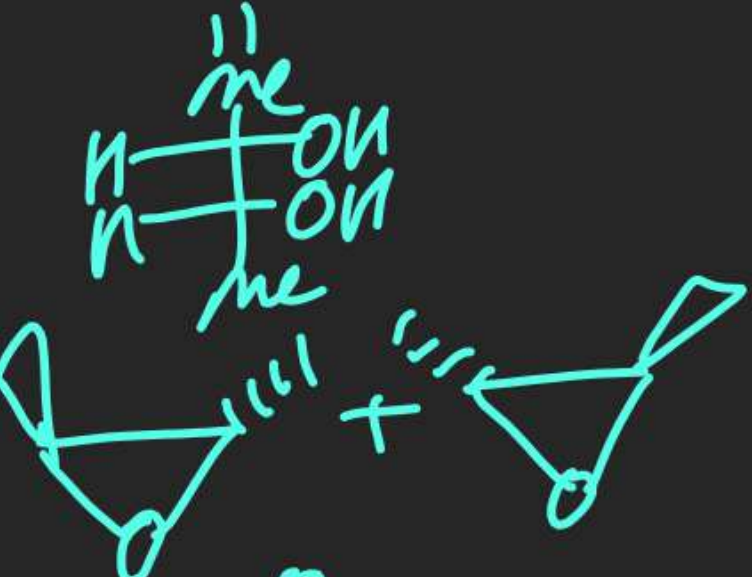
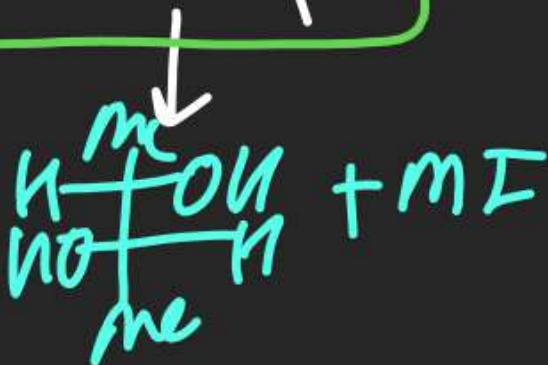
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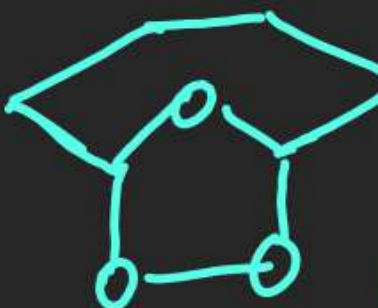
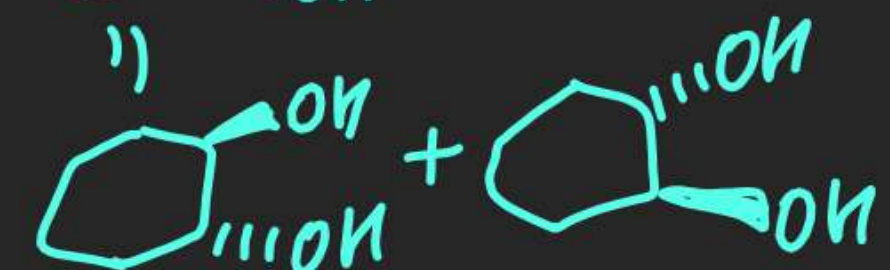
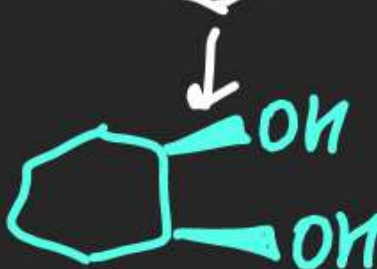
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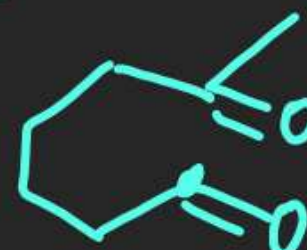
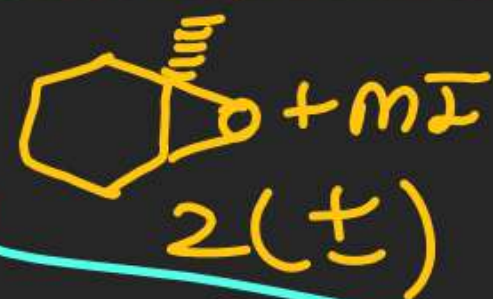
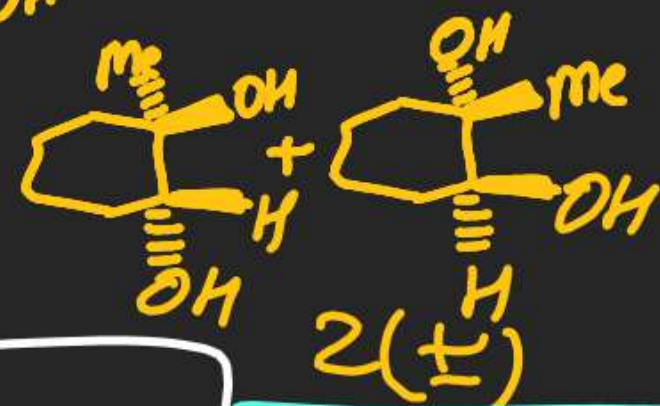
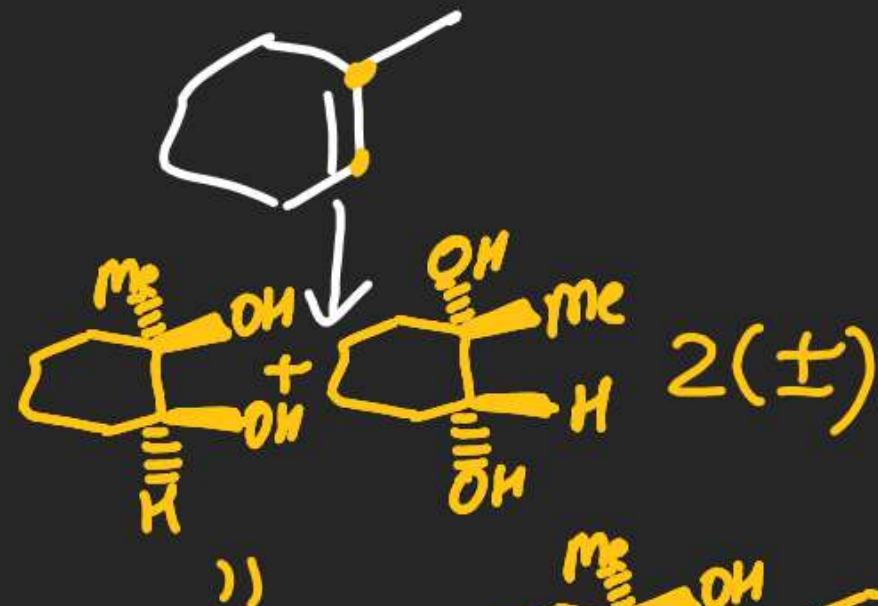
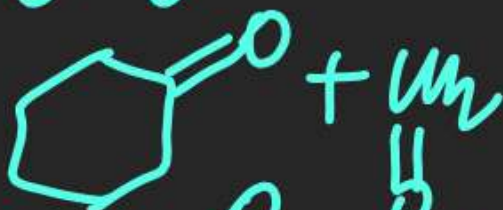
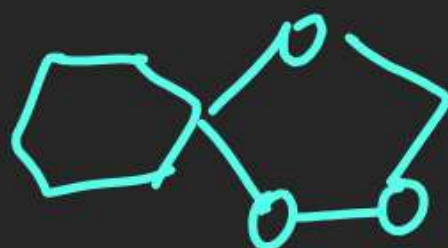
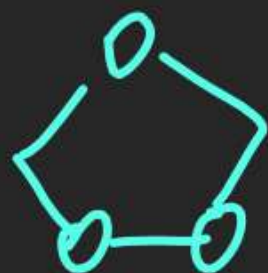
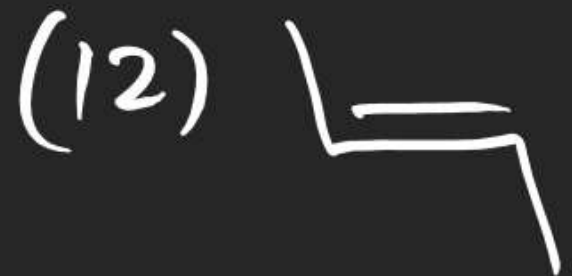
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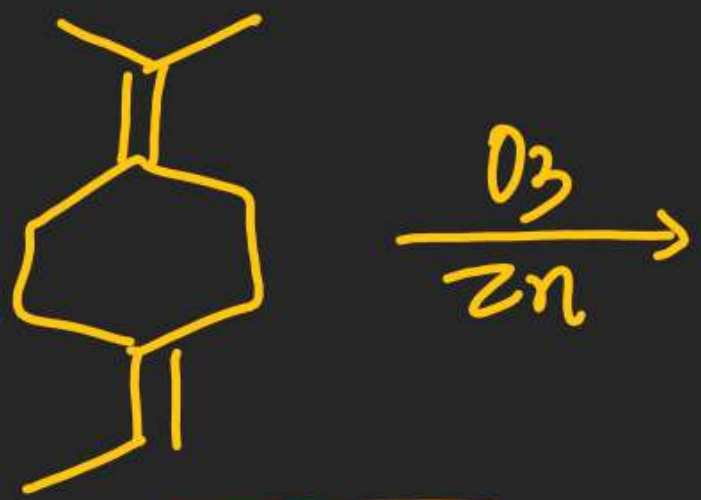
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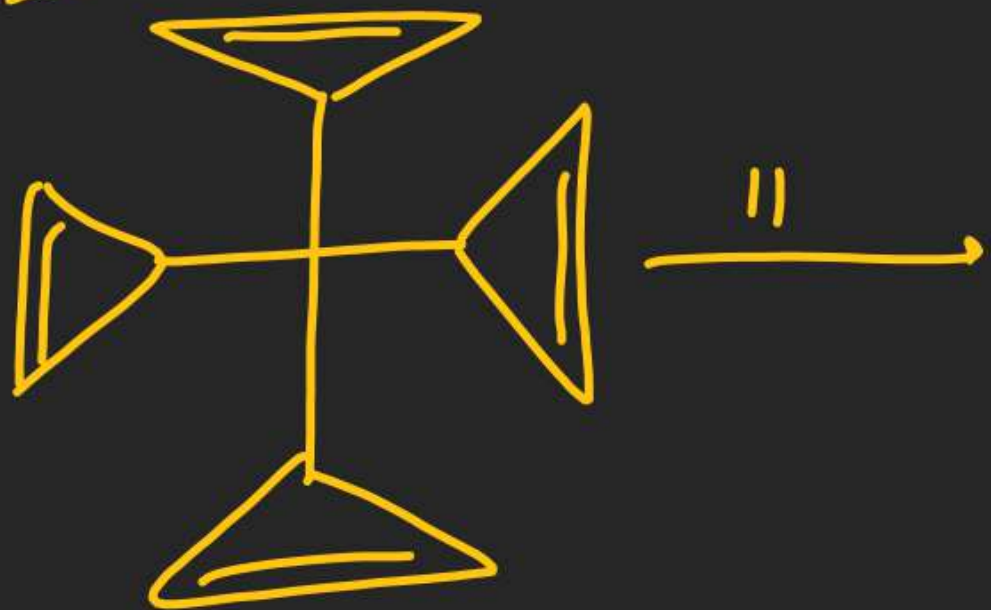




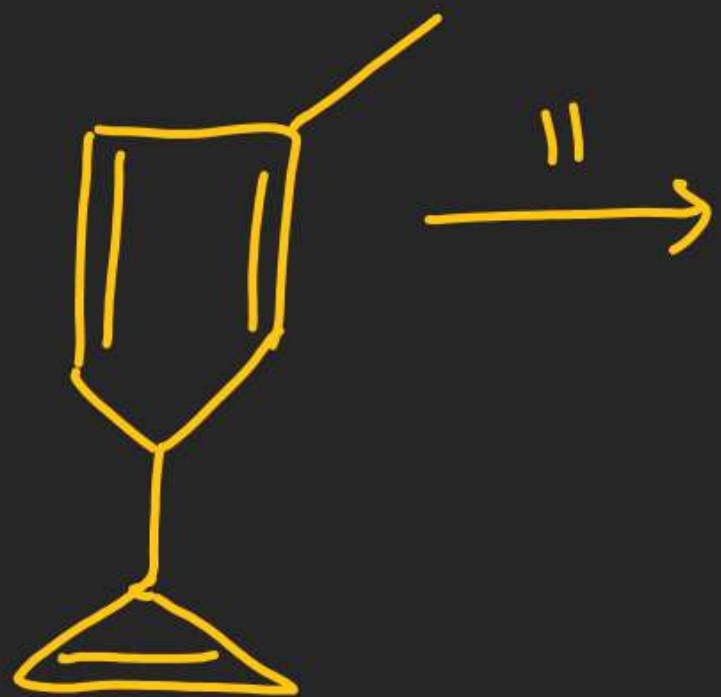
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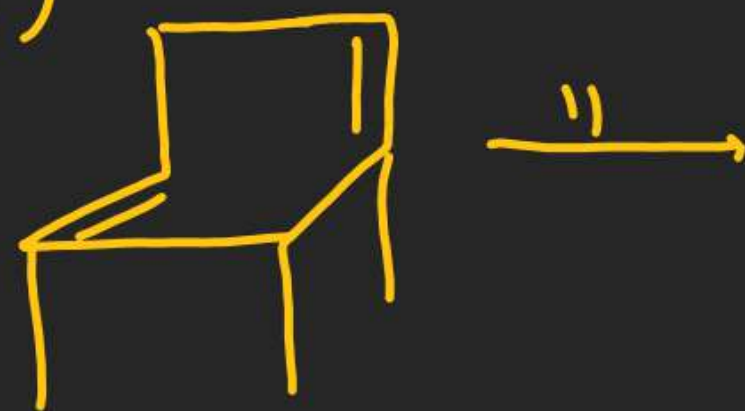
(17)



(18)



(19)



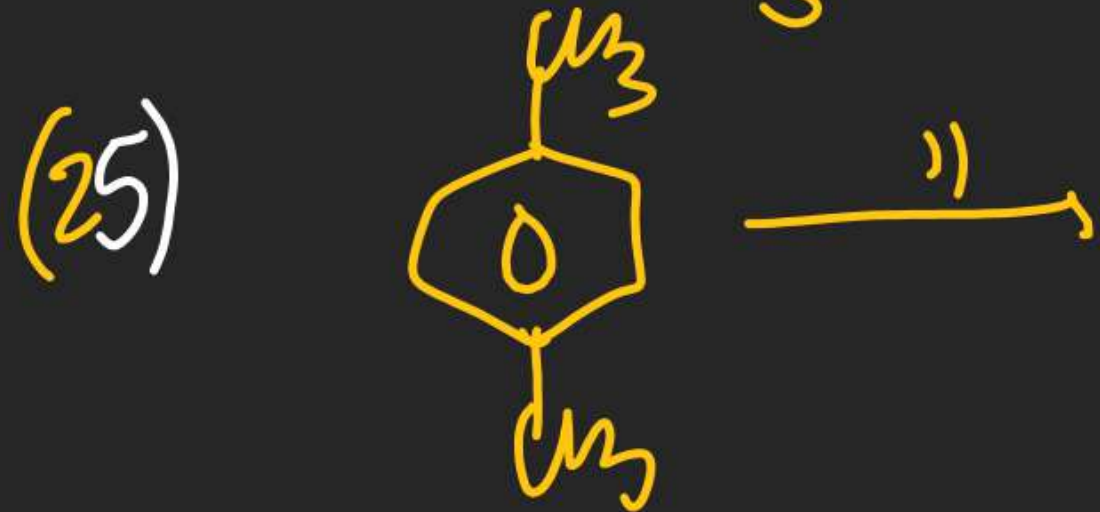
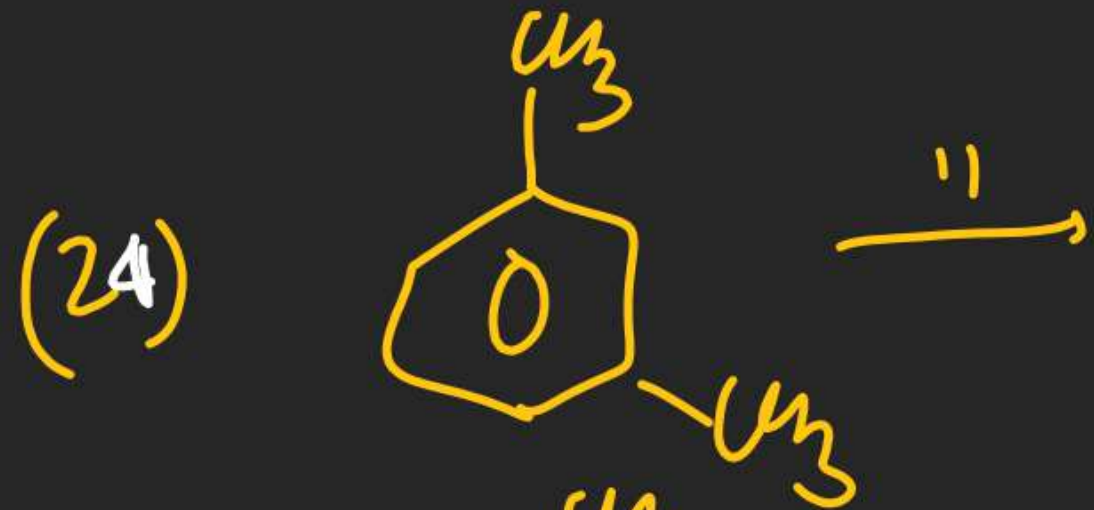
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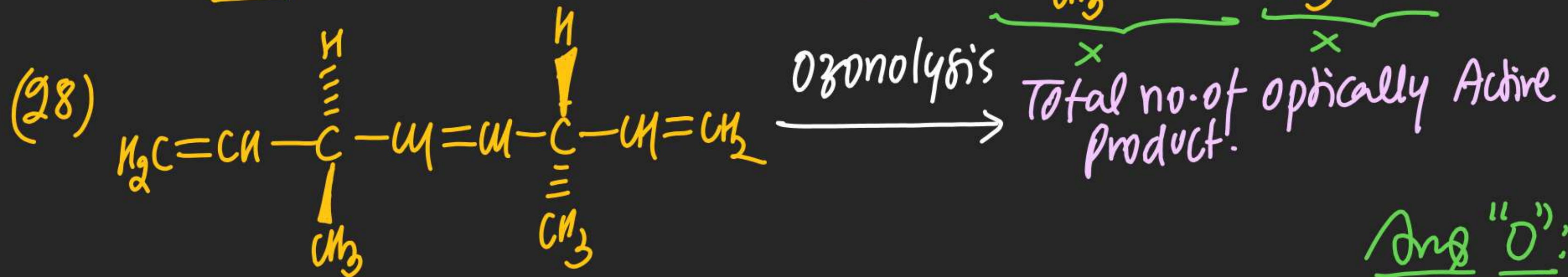


(21)

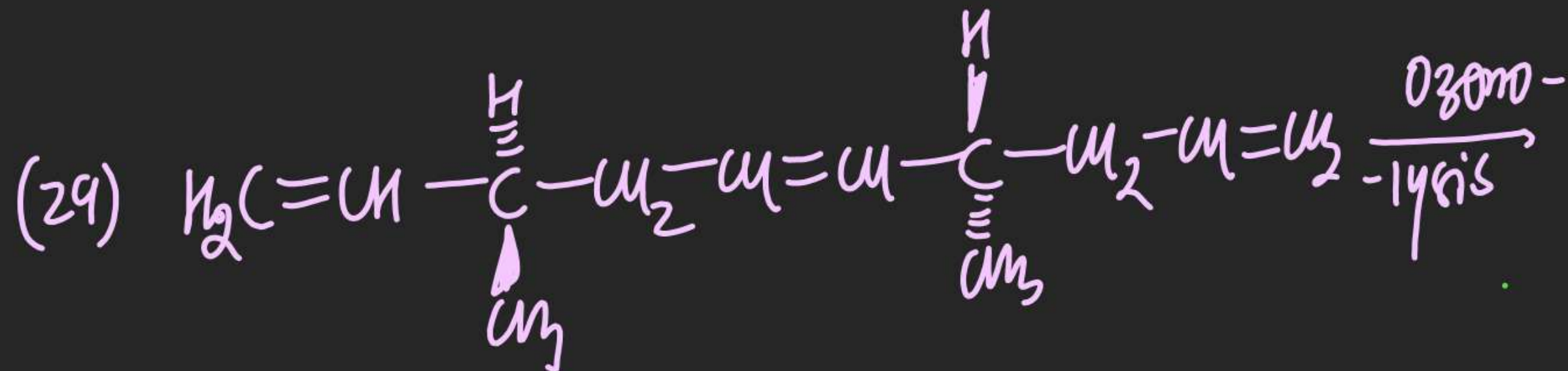




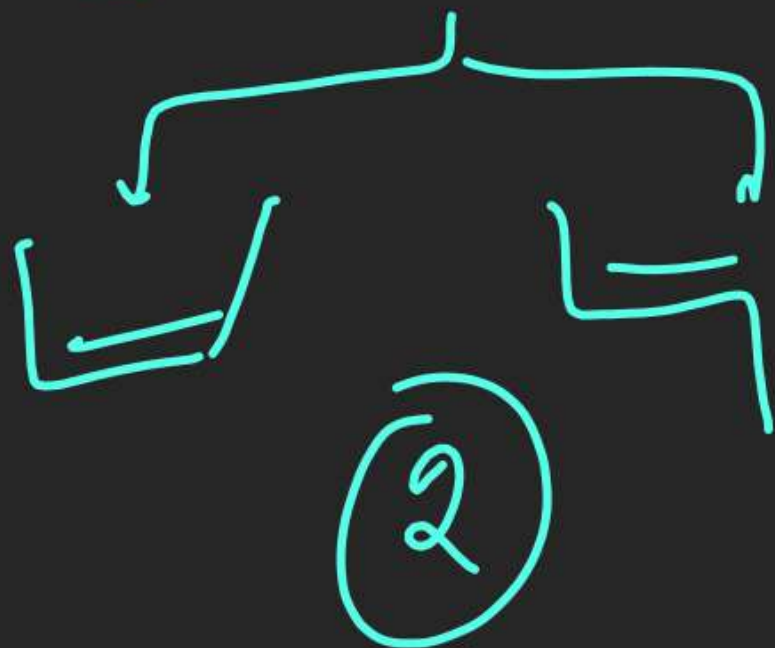
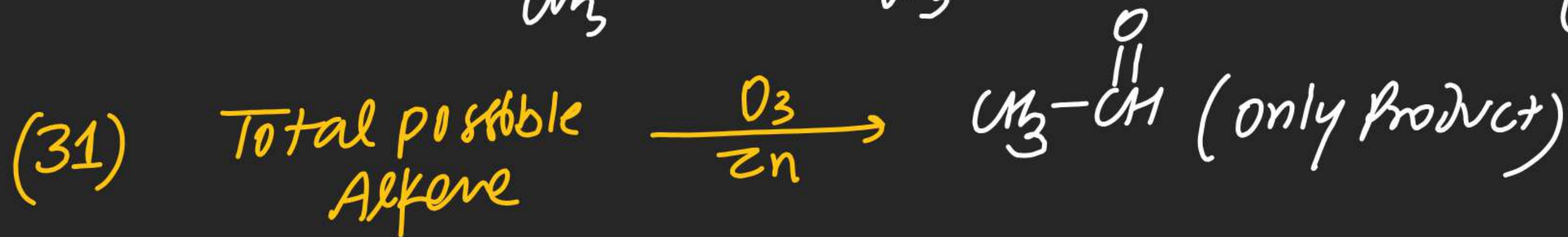
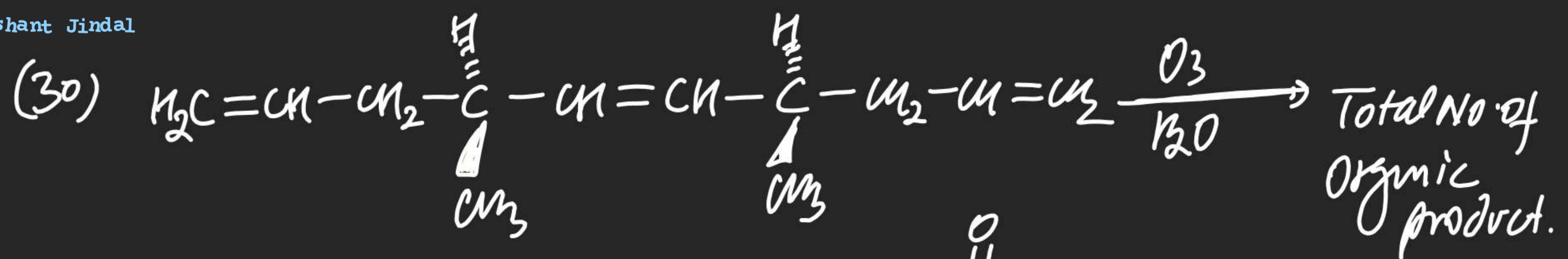


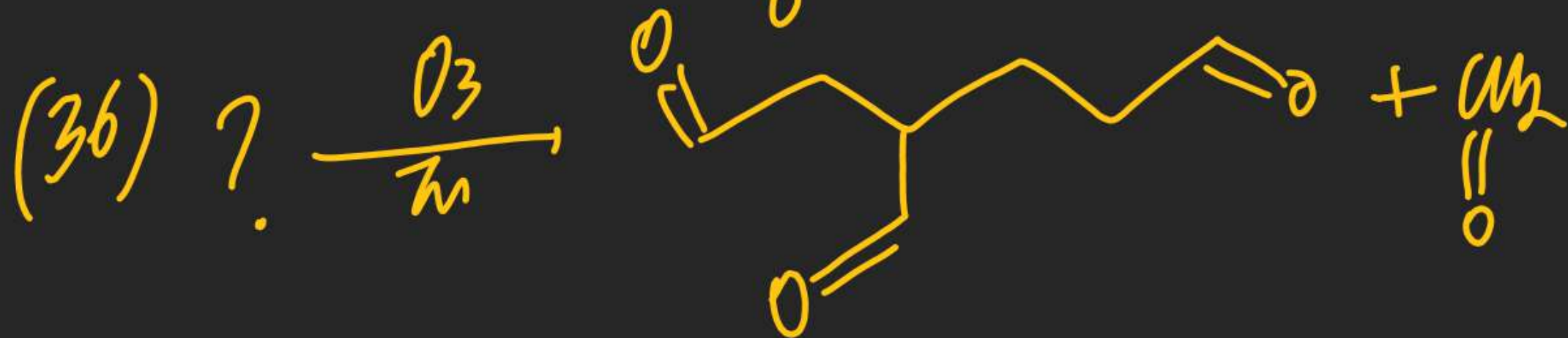
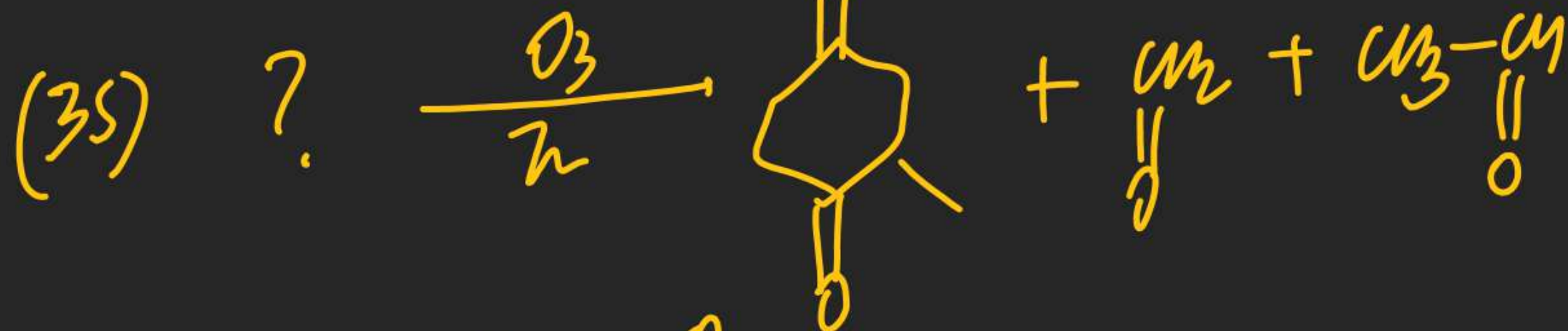
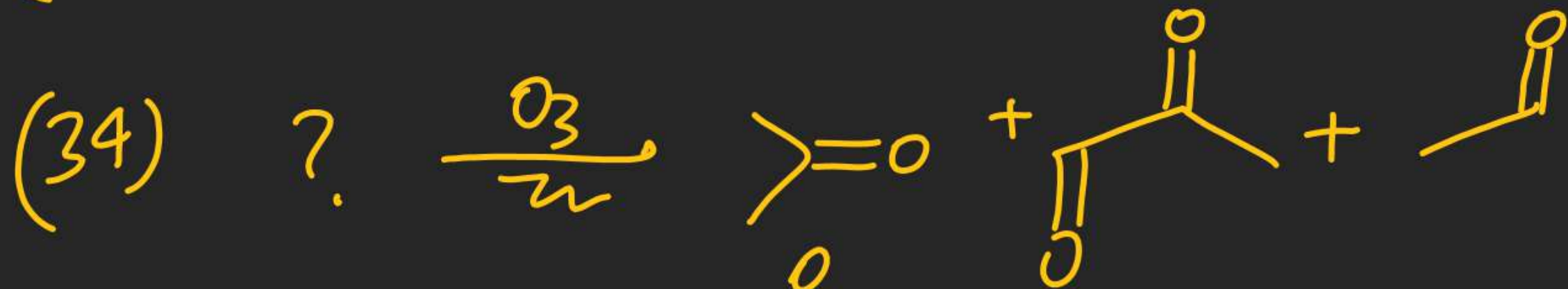
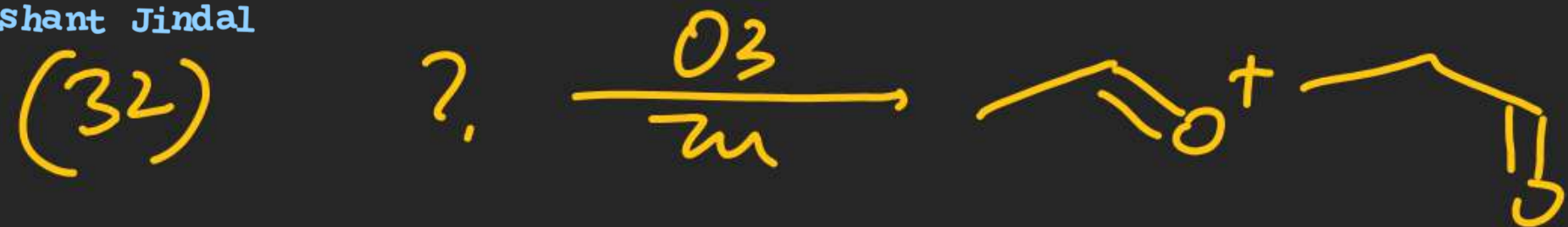


Ans "0":

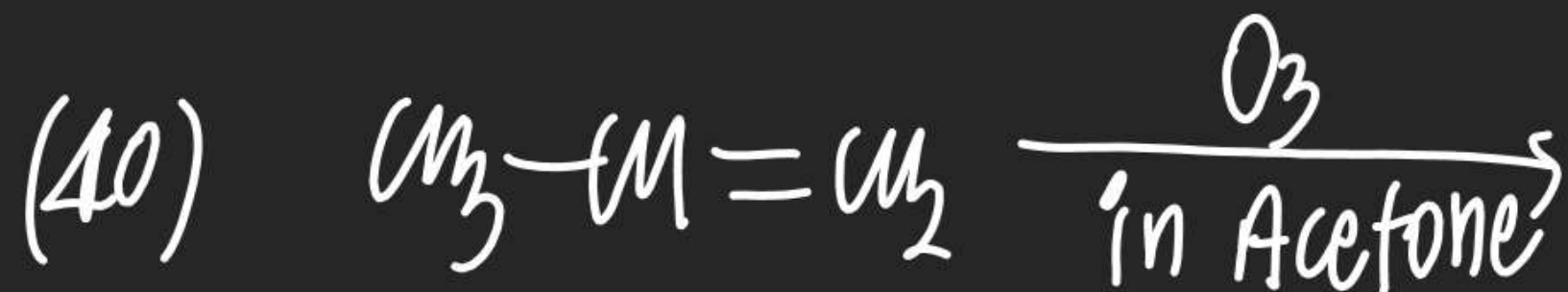
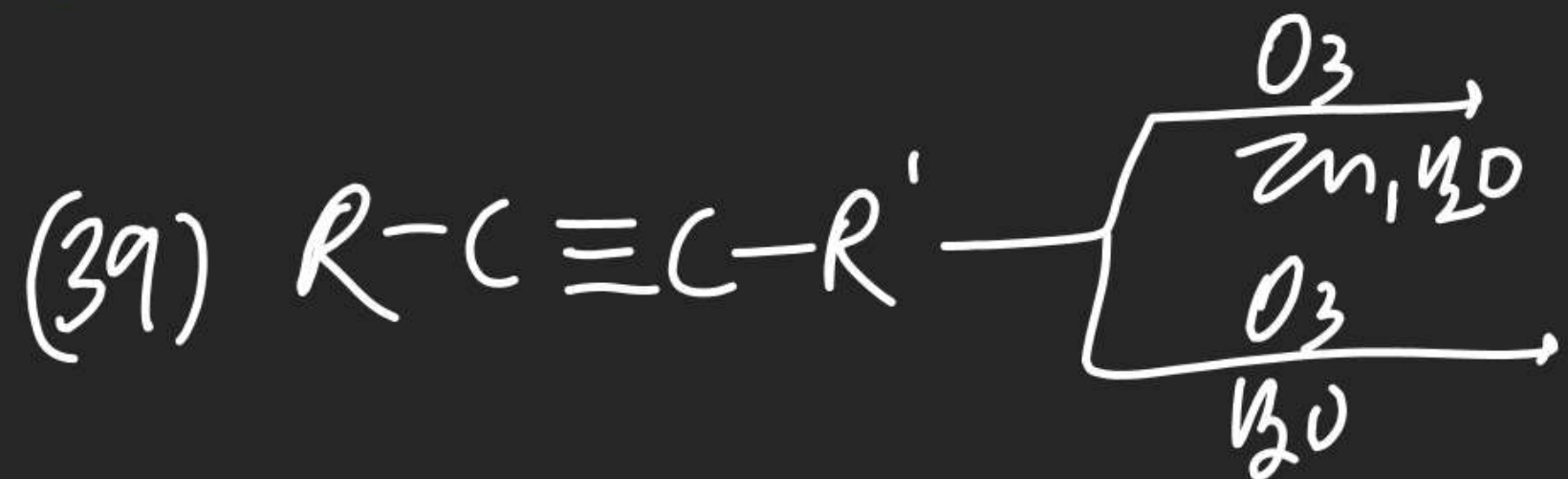
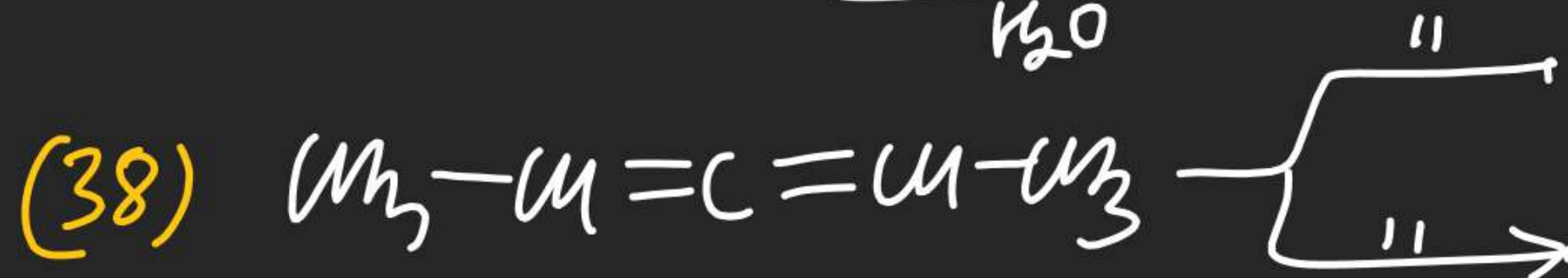
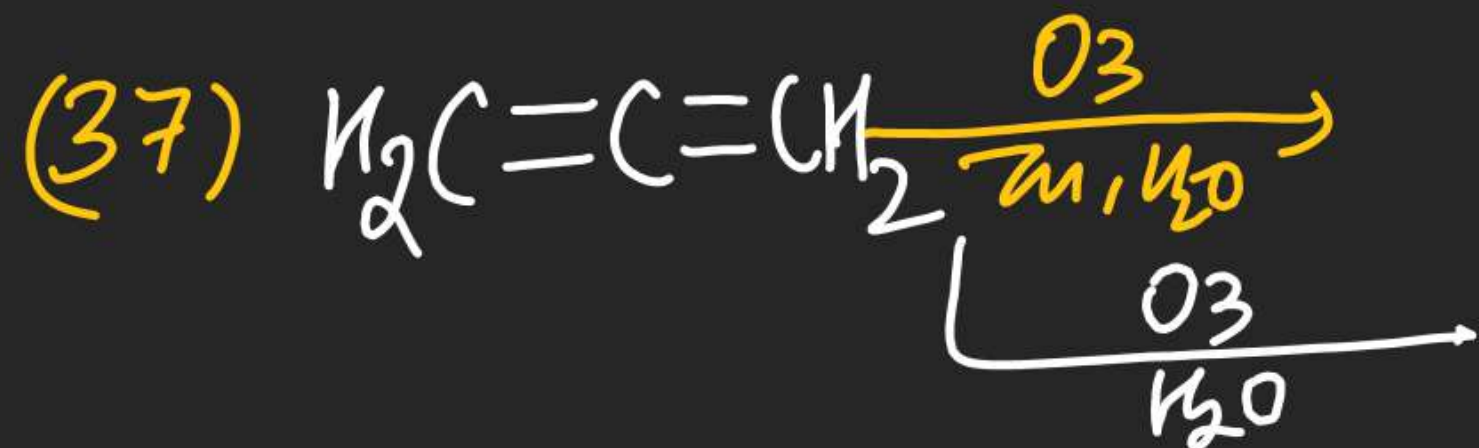




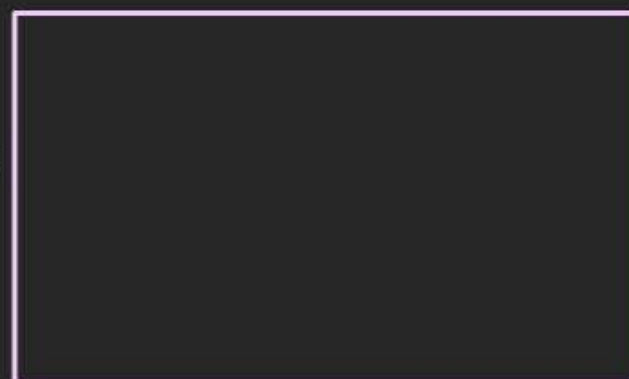
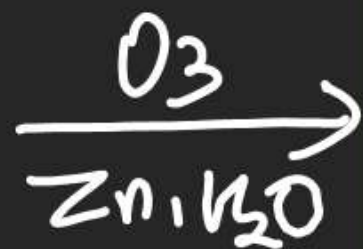




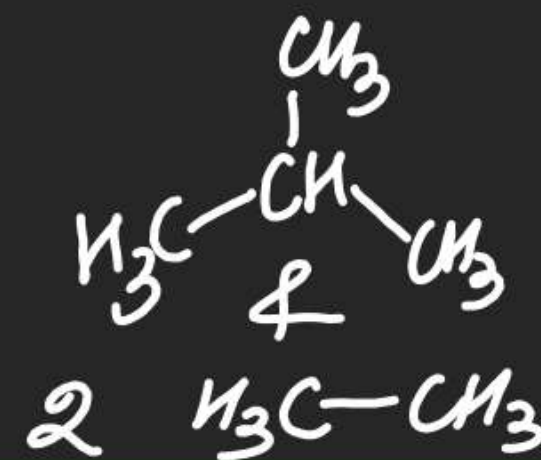




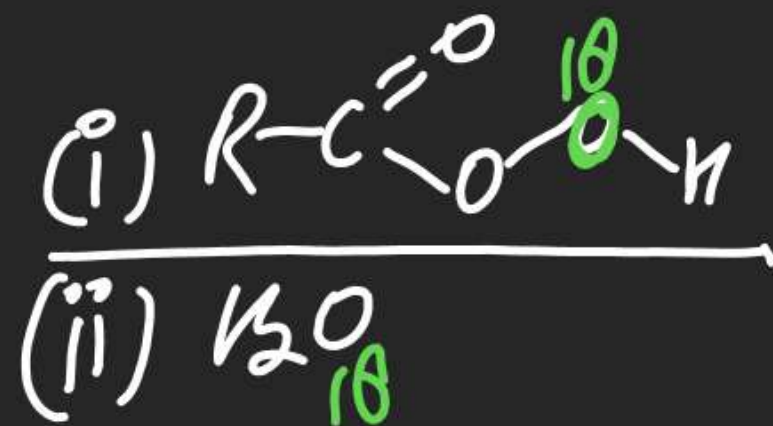
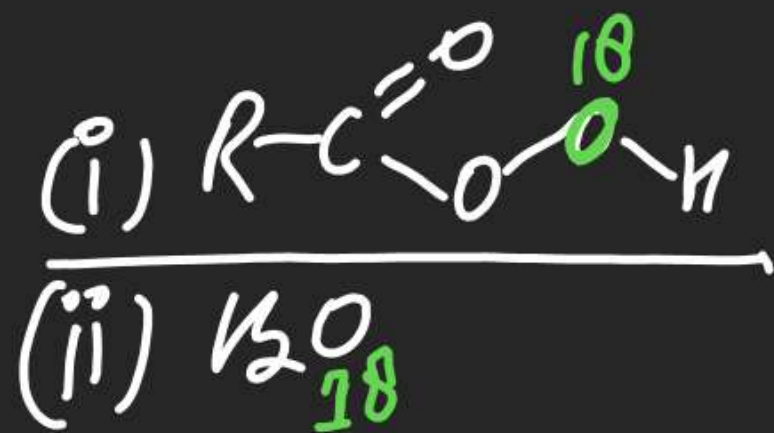
(41) Total possible 'x'  
(mf = C<sub>8</sub>H<sub>10</sub>)



products

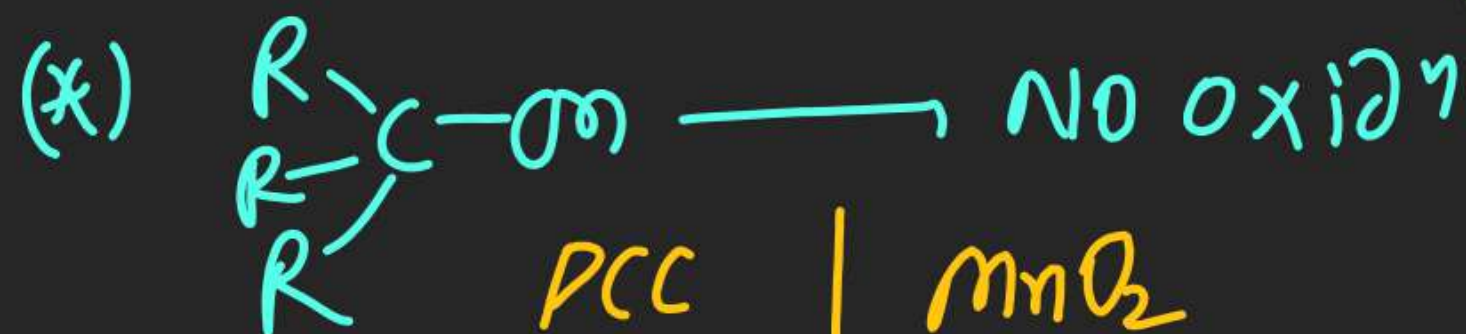
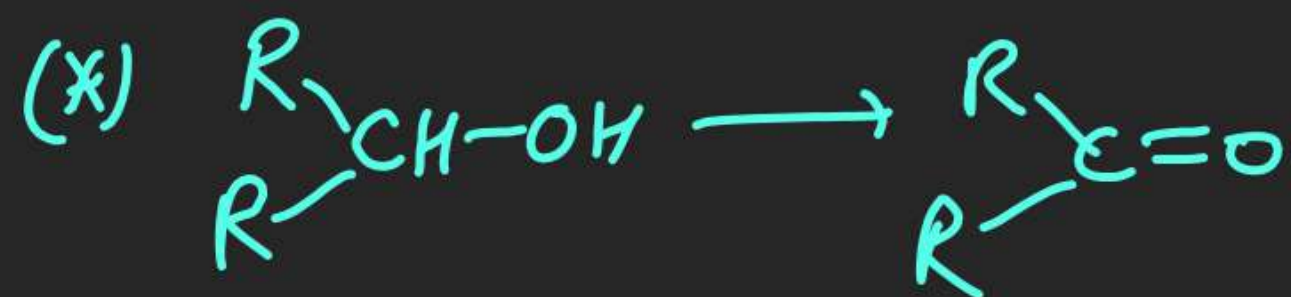
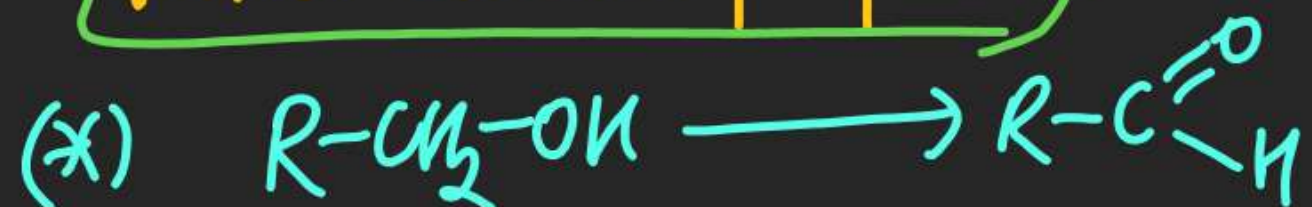






# Oxidation of Alcohol:-

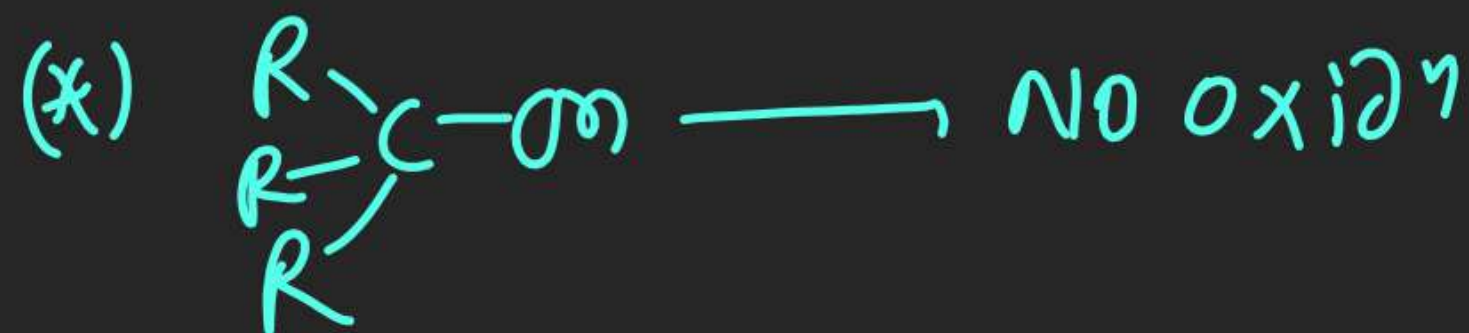
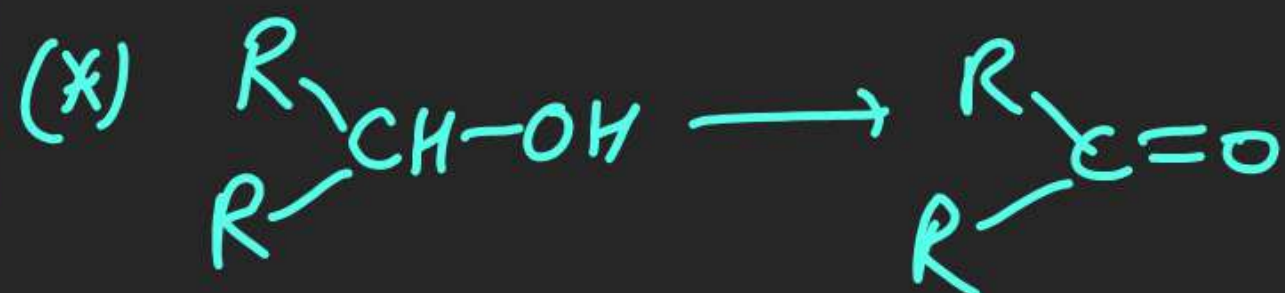
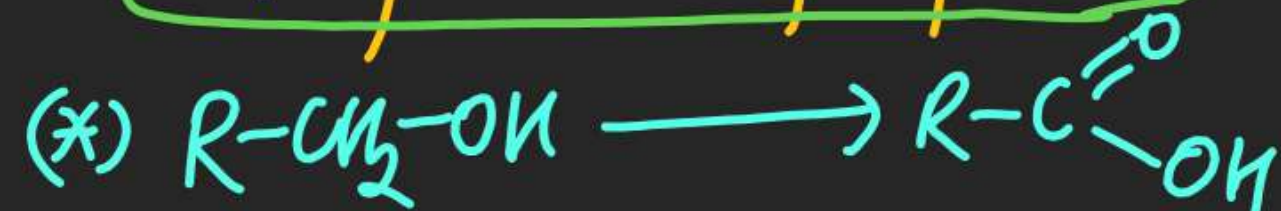
## mild oxidising agent



PCC  
PDC  
Collins  
NBS  
Cr, Δ

MnO<sub>2</sub>  
TsCl, NaHCO<sub>3</sub>, Δ

## Strong oxidising agent



Acidic K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>  
KMnO<sub>4</sub>  
CrO<sub>3</sub>/H<sub>2</sub>SO<sub>4</sub>



# (#) Oxidation By Acidic $K_2Cr_2O_7$ :-

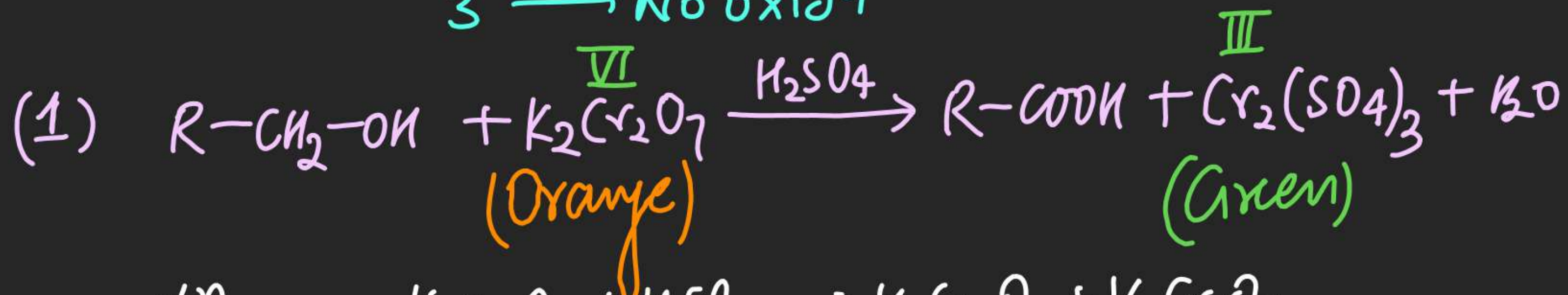
$\Rightarrow$  Strong O. Agent

$\Rightarrow$  Oxidises

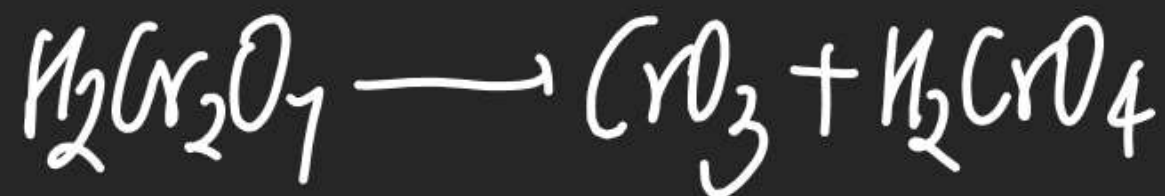
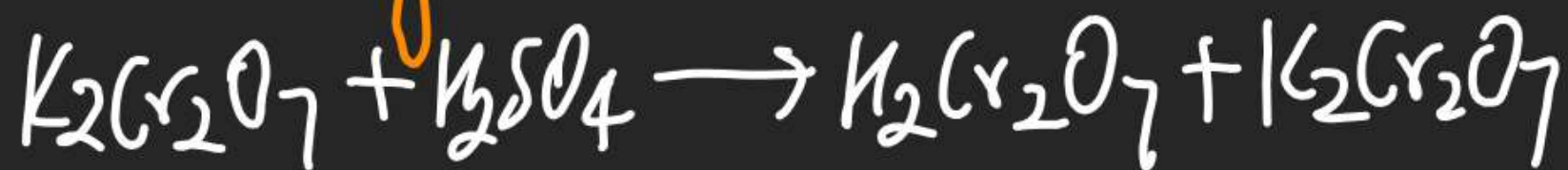
$1^\circ \longrightarrow$  Acid

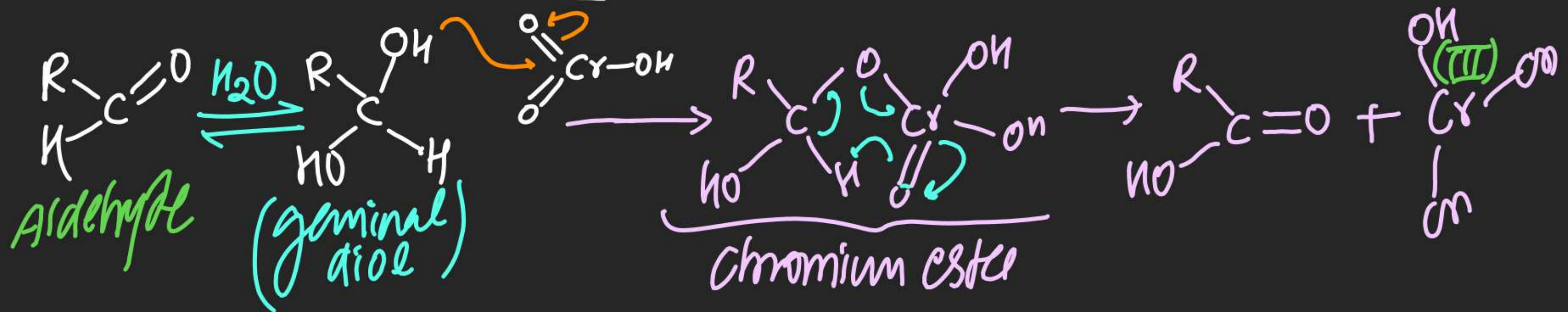
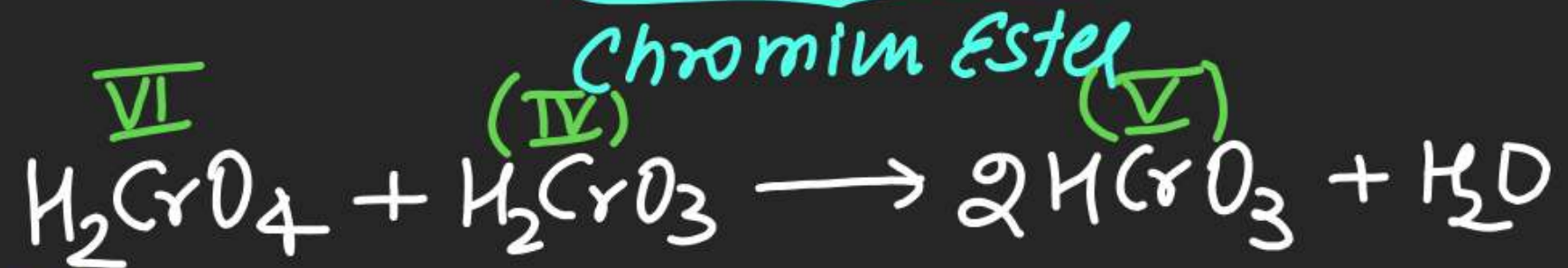
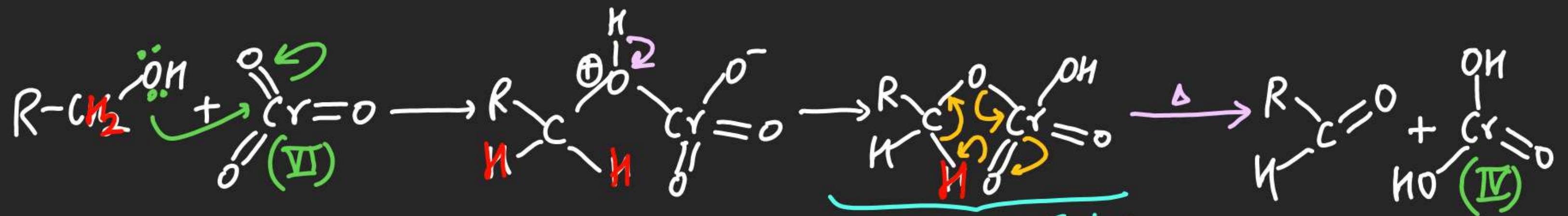
$2^\circ \longrightarrow$  Ketone

$3^\circ \longrightarrow$  No oxidation



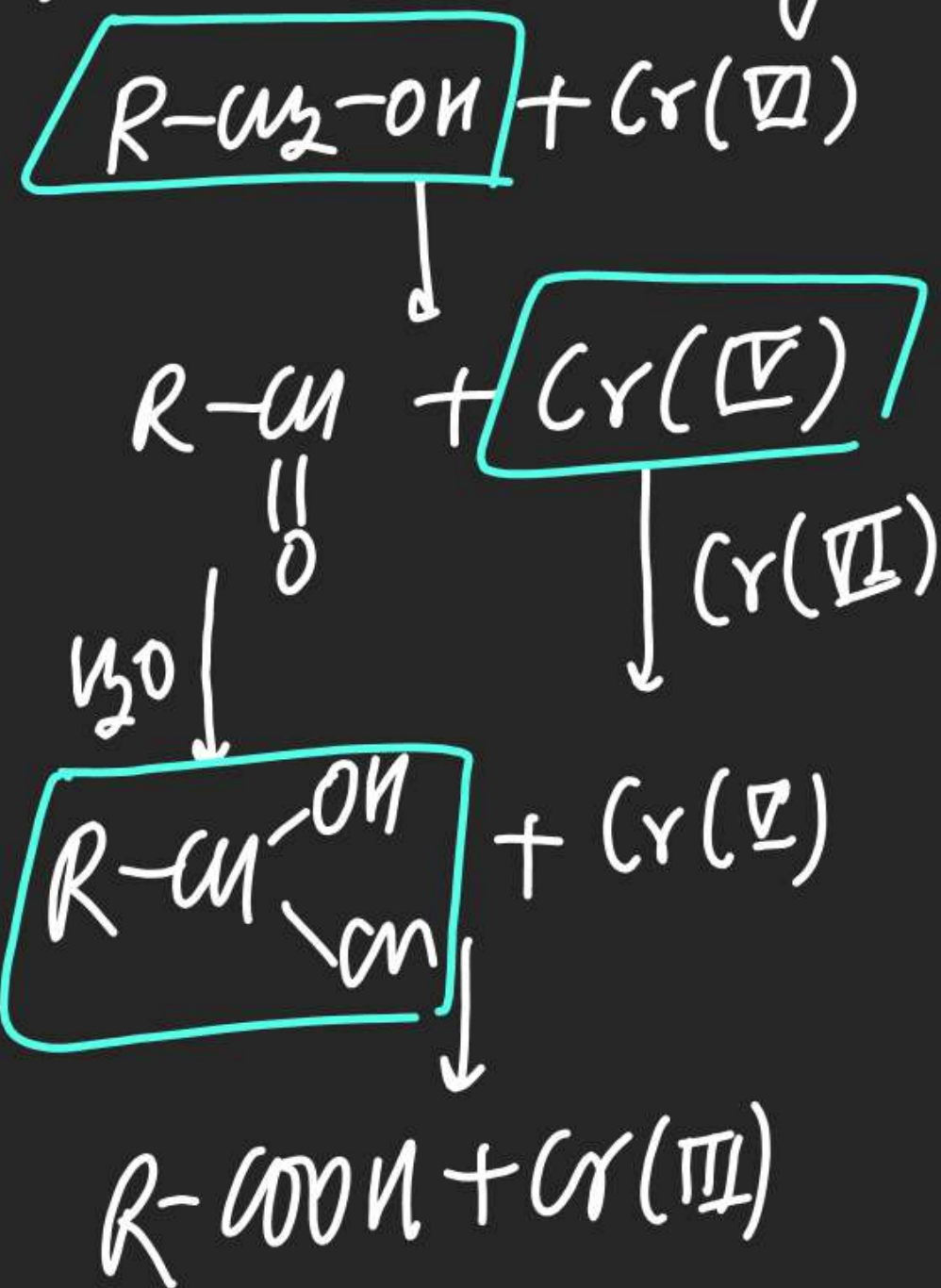
mech<sup>n</sup>







Note (i) Cr-Ester intermediate  
(ii) species oxidised during Rxn



(iii) O.S change



(iv) color change

MI Orange  $\rightarrow$  Green

(v) Rxn is used in POC for distinction of Alcohol.