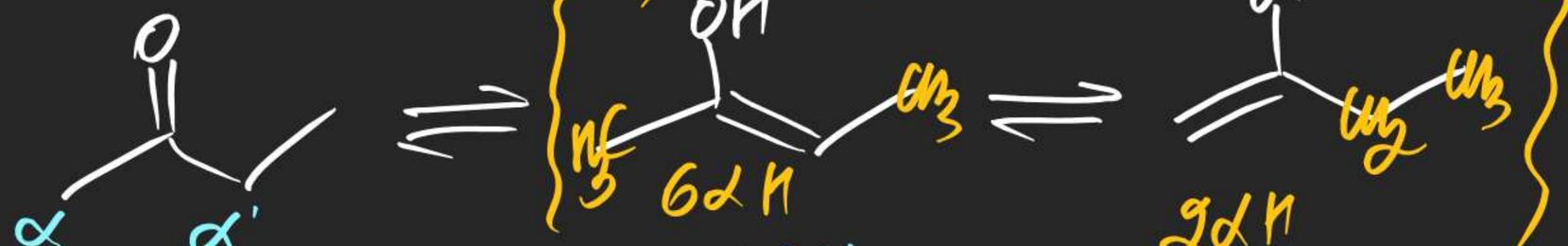
Nishant Jindal

STEREOISOMERISM

HW (Discussion) Theory Copy

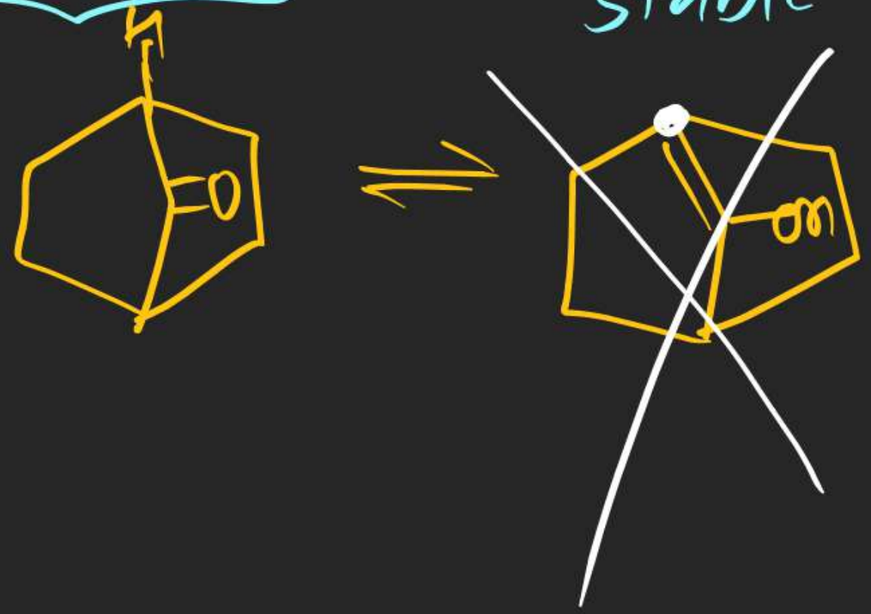
(2)



most stable

II – most stable

(10)



नहीं ऐसे हो नहीं सकता

ना Real

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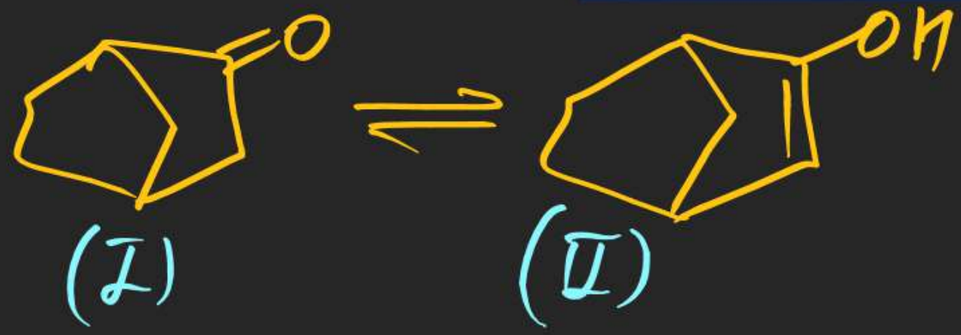
STEREOISOMERISM

(11)



(I) (II)

(12) No Tautomerism

(13) (a)

(99.99 %)

(b)

≈ 99 %

(≈ 1 %)

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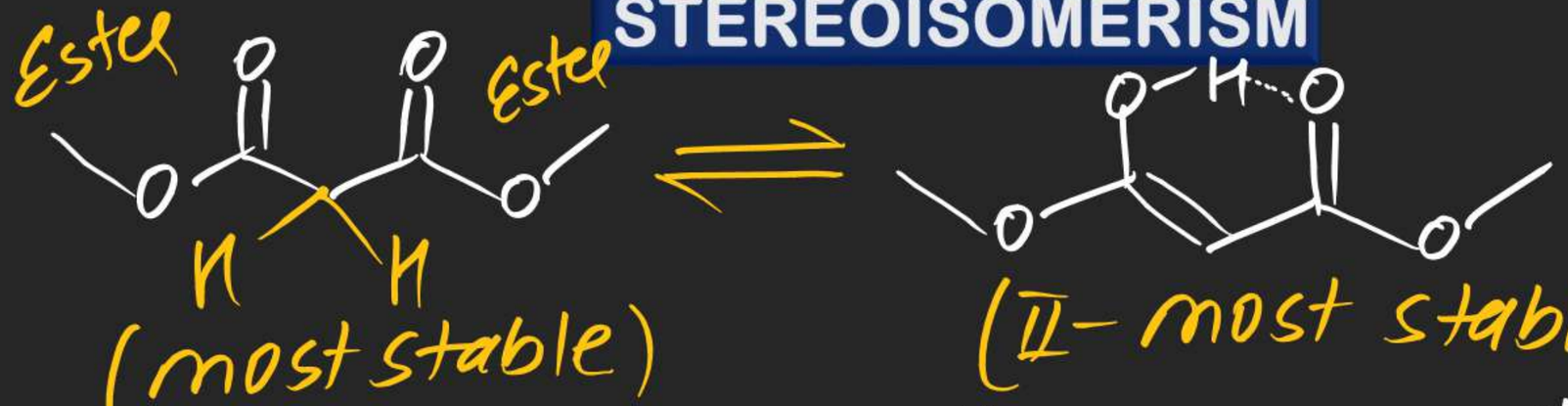
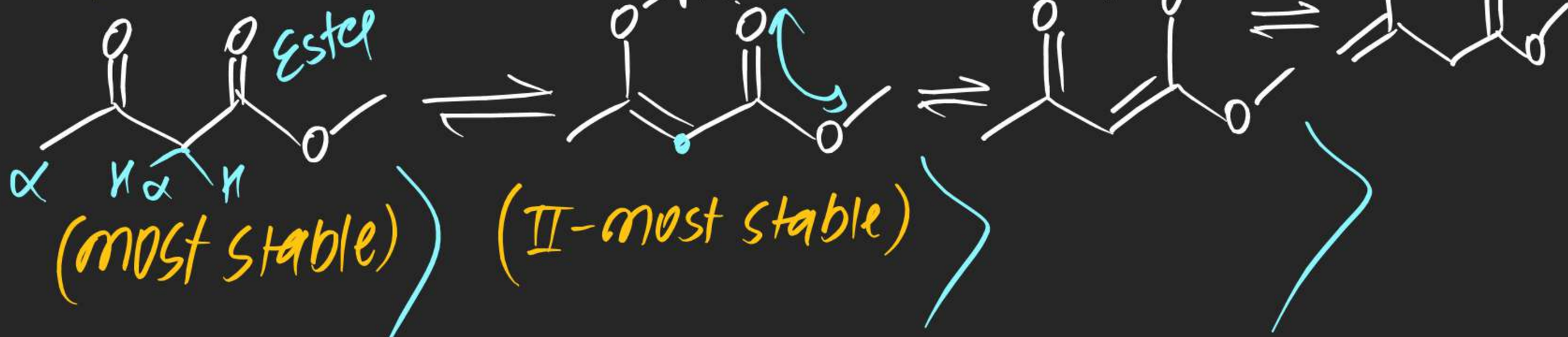
STEREOISOMERISM

(14)



(most stable) ⇌ (II- most stable)

(15)



(most stable) ⇌ (II-most stable) ⇌

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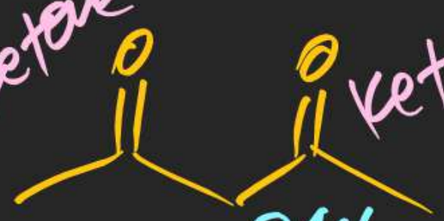
STEREOISOMERISM

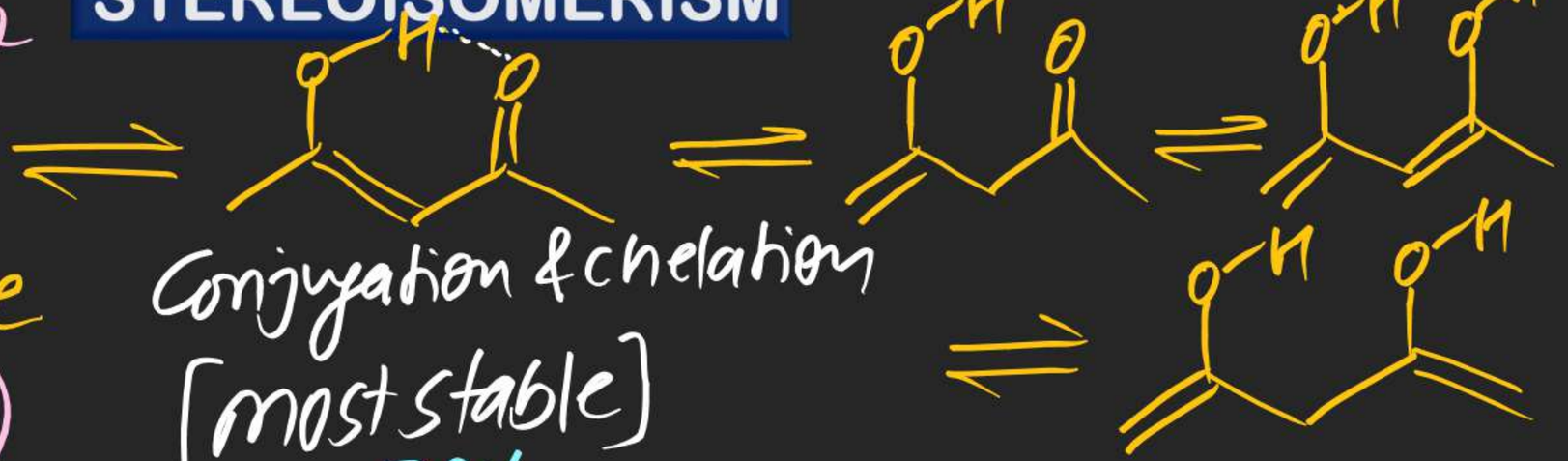
(16) ketone ketone



24%.

Acetyl Acetone

(II - most stable)

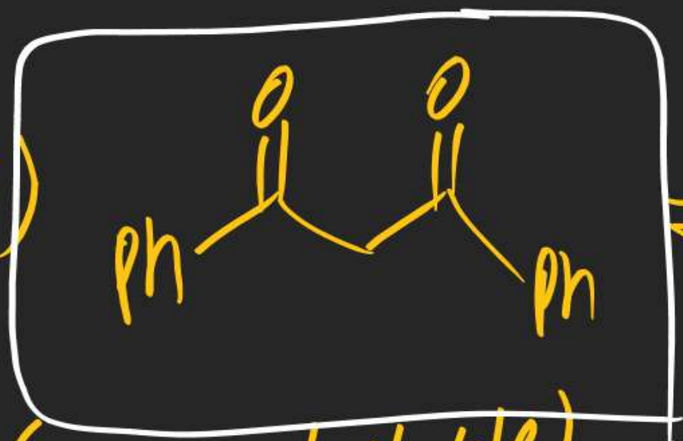


Conjugation & chelation

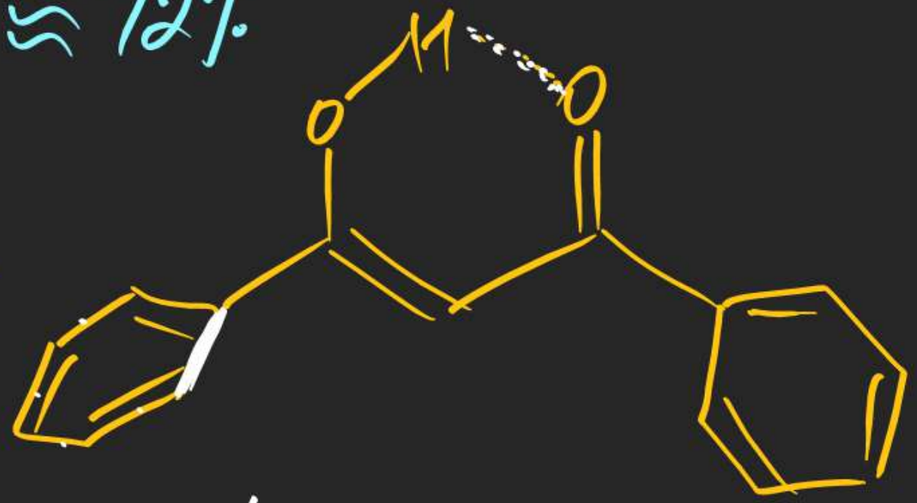
[most stable]

≒ 72%.

(17)



(II - most stable)



(Negative test for ketone) ≒ 99.99% (most stable)

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STEREOISOMERISM

(18)

4αH

most stable

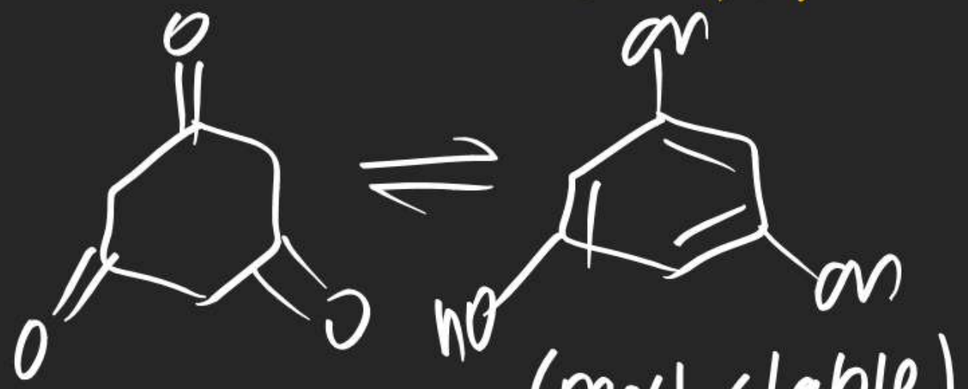
≒ 76%

2αH

II-most stable

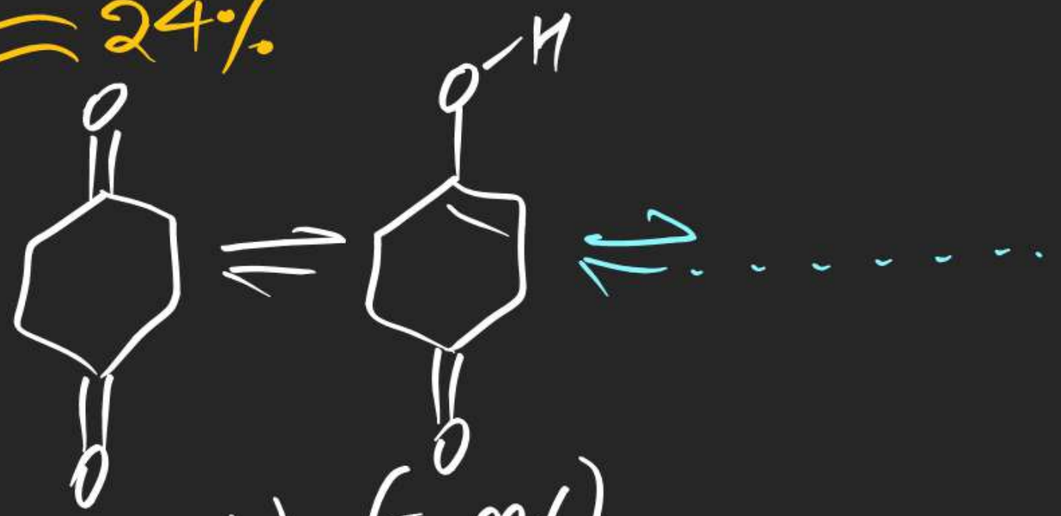
≒ 24%

(19)



(most stable)

(20)



(most stable) (II-m.s)

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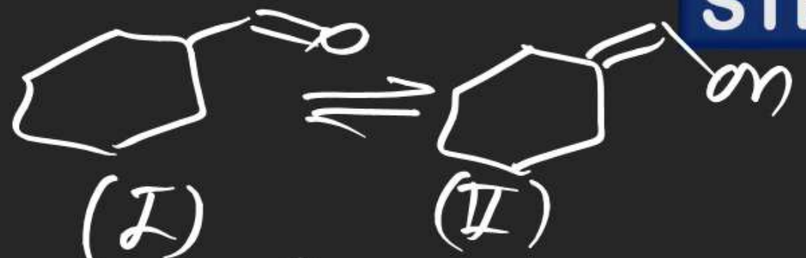
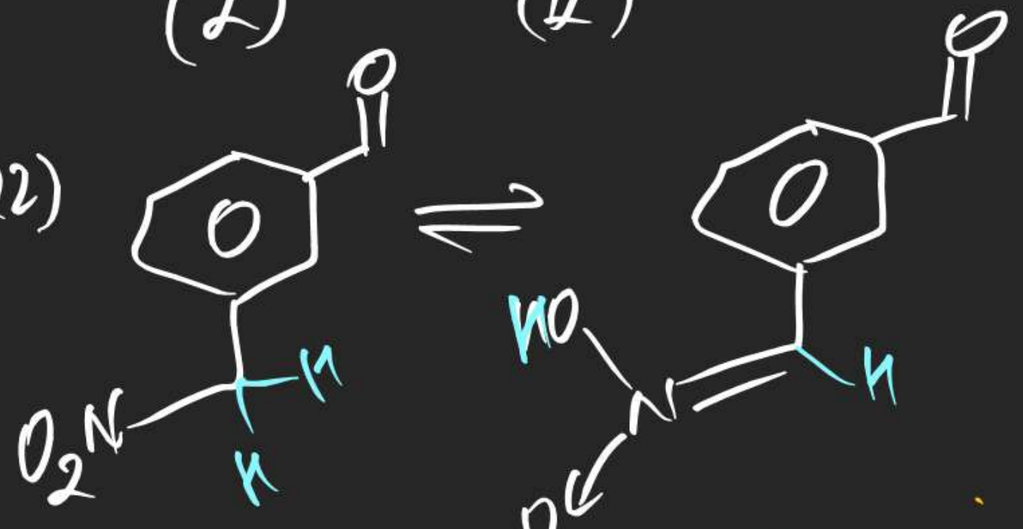
(21)



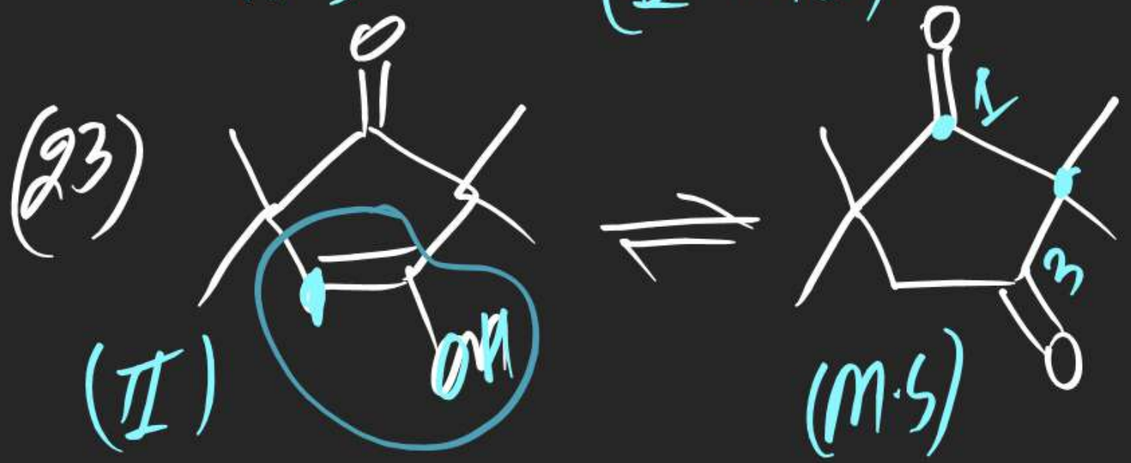
(I) (II)

(22)



M.S (II - M.S)

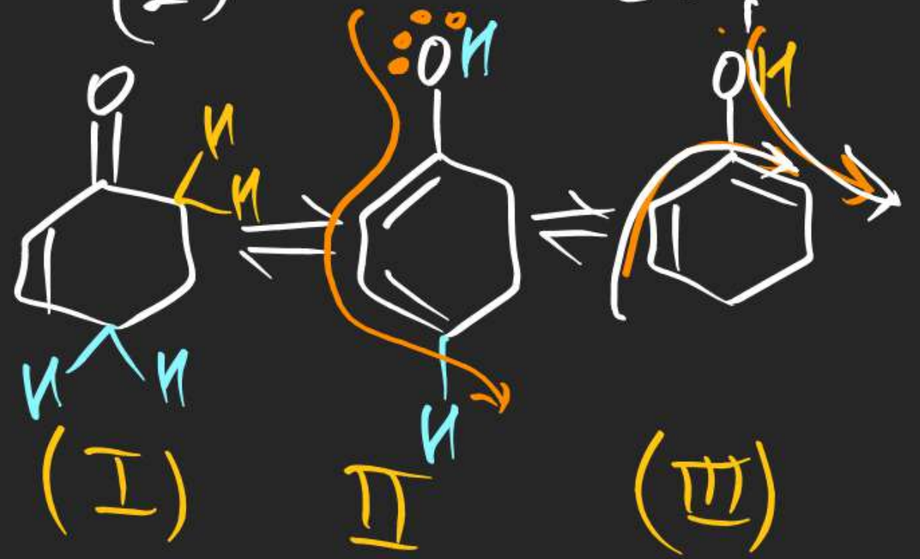
(23)



(II) (M.S)

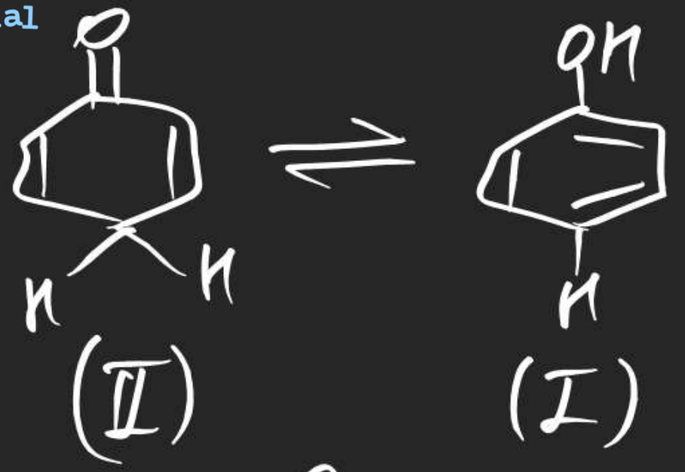
(24)

(25)



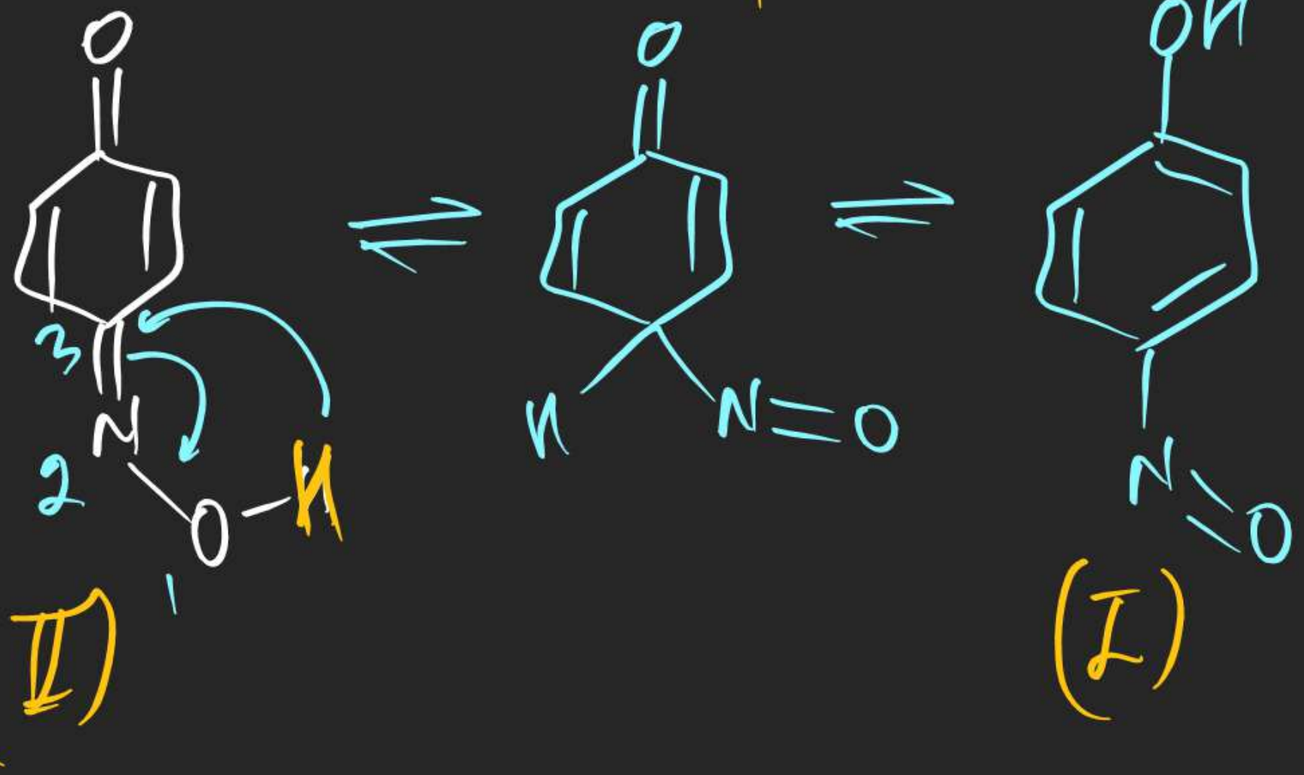
(I) II (III)

(26)



(II) (I)

(27)

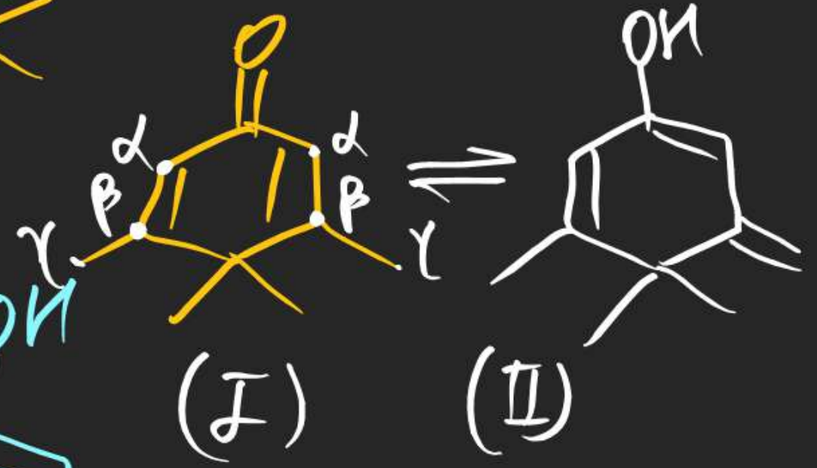


(II) (I)

(28)

No Tautomerism

(29)



(I) (II)

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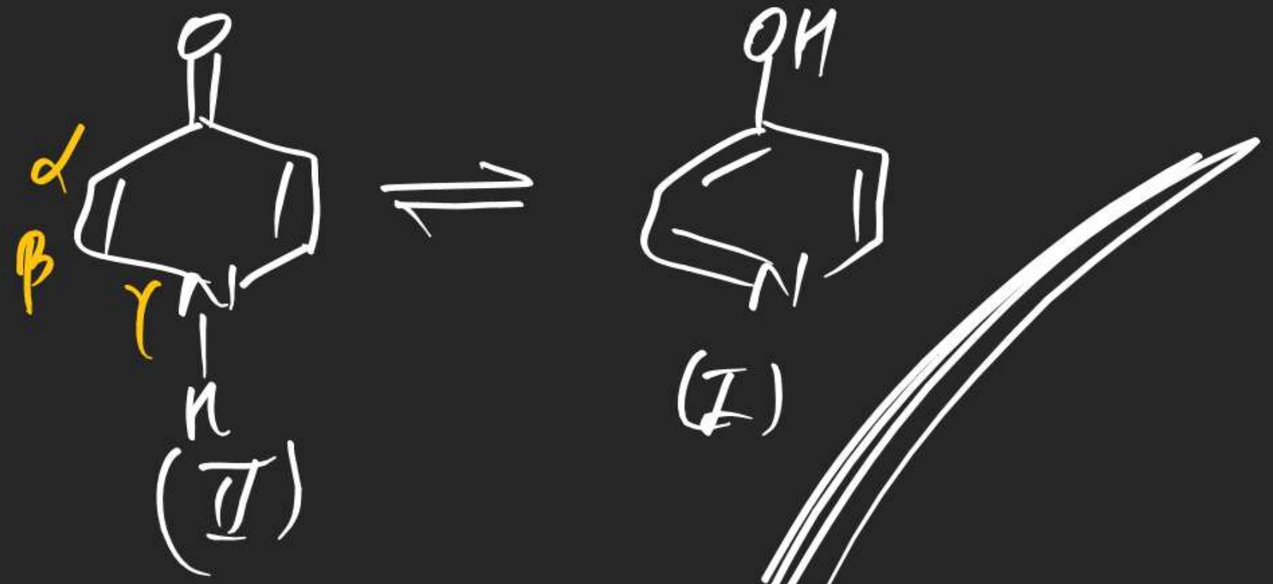
(30)



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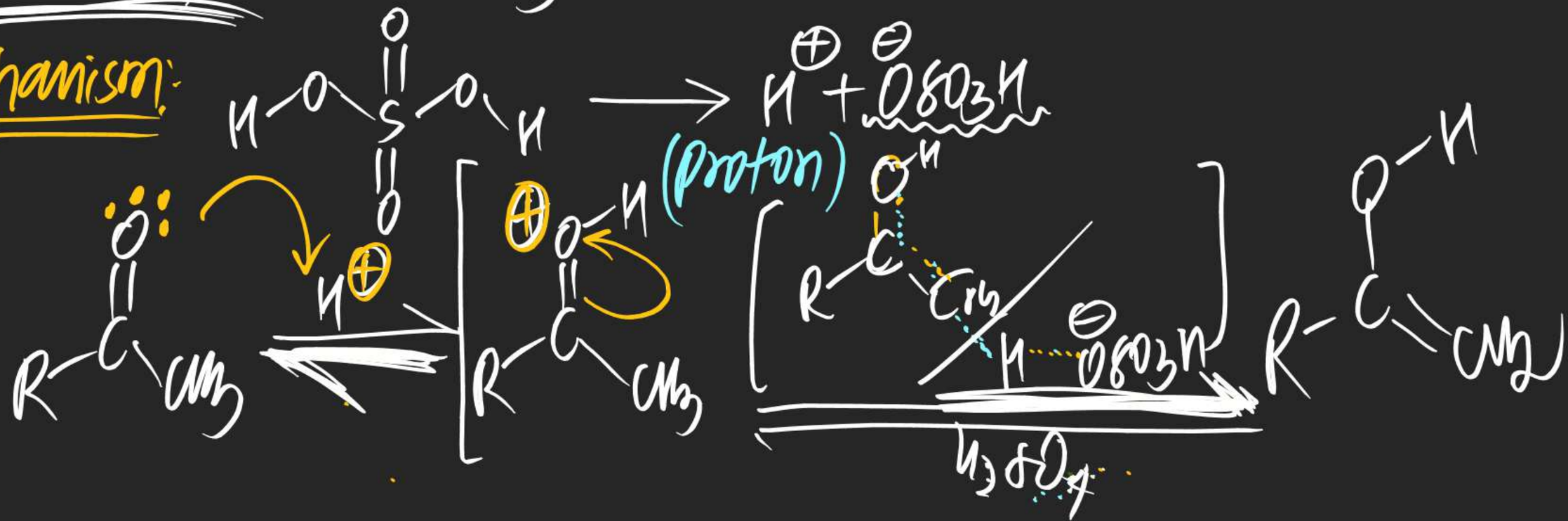
Note:- Tautomerism can be Catalysed By very Both Acid & Base.

BF
BB

In Acidic medium:

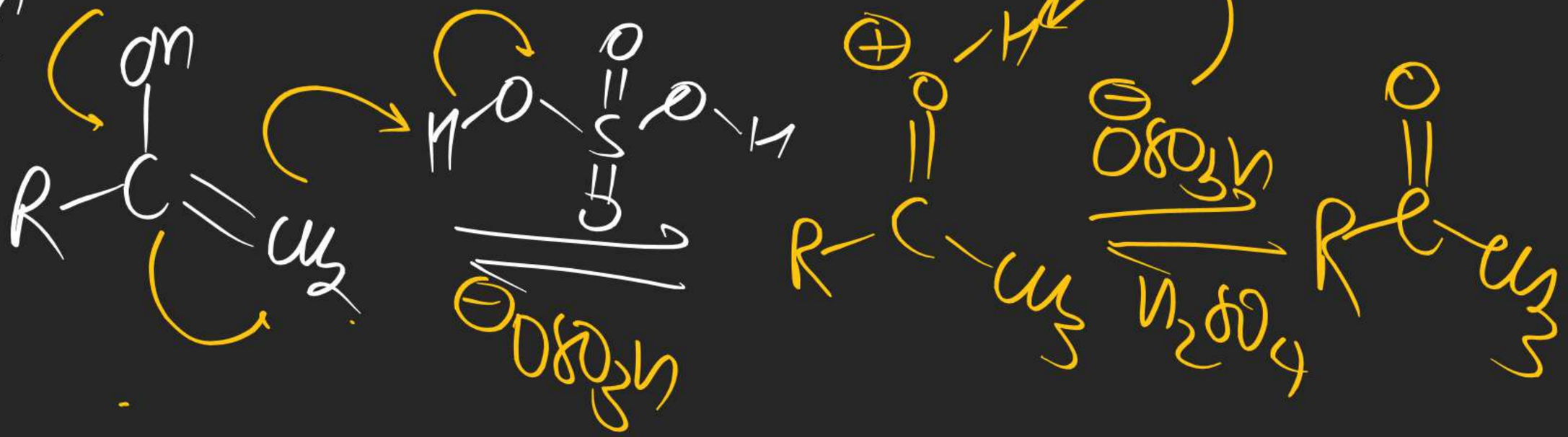
(Keto to Enol)

Mechanism:



Enol to keto in Acidic medium

Mechⁿ.



Basic Medium:

Isomerism Preference Order

Ring chain > Tautomers > Functional isom

> Metamer > Position > Chain