

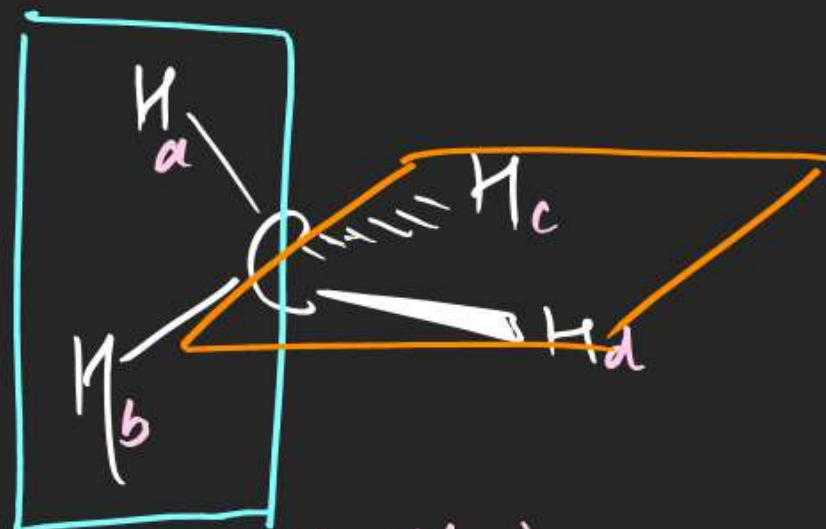
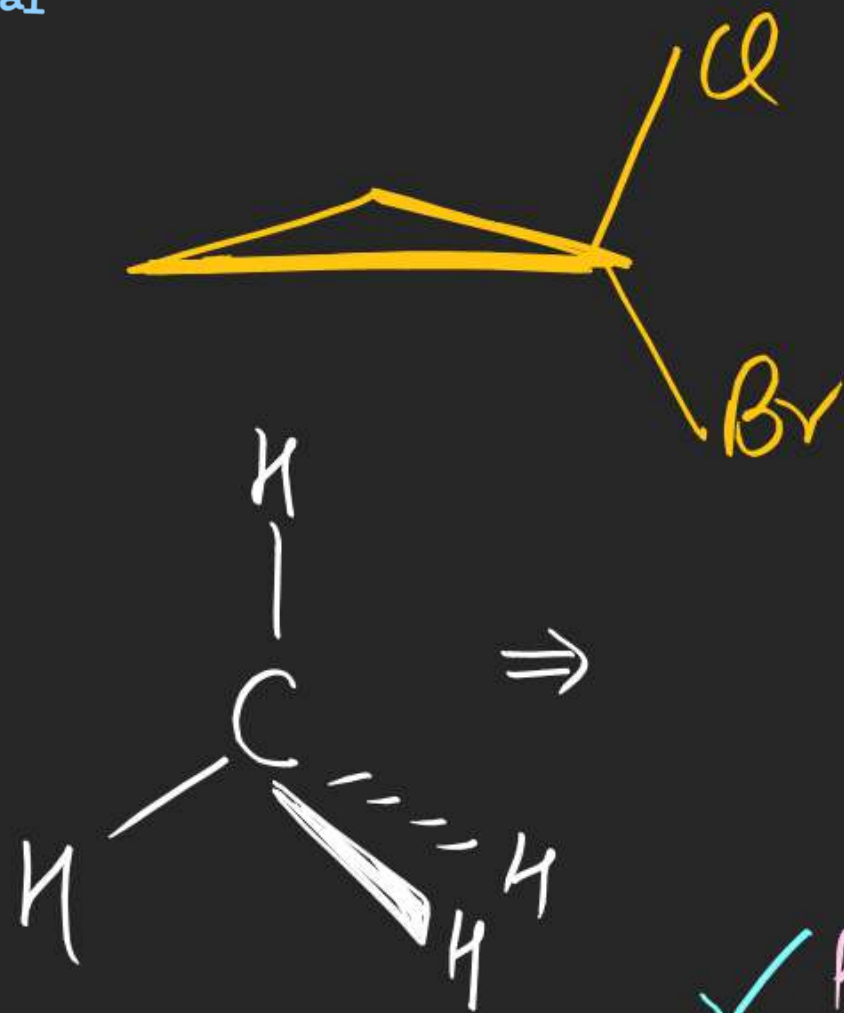
(24) Nail

Circular Top

POS=∞

Elliptical Top

(POS=2)

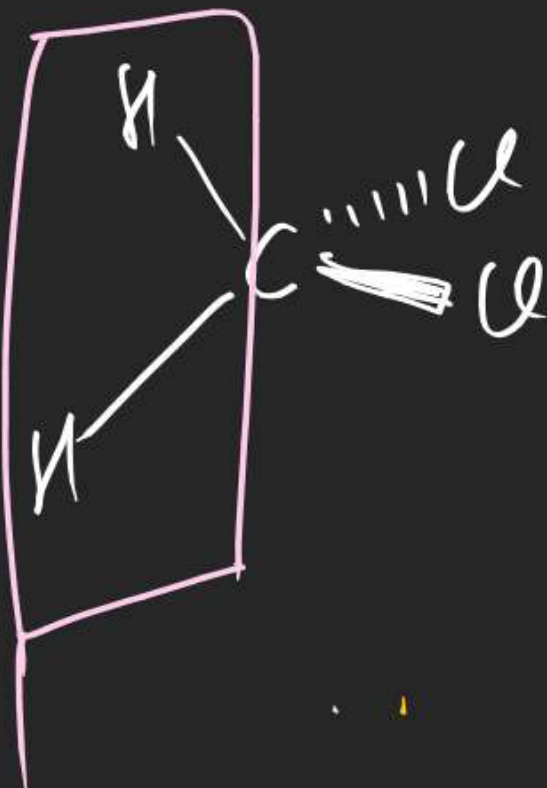


- ✓ POS \Rightarrow $H_a H_b$
- ✓ POS \Rightarrow $H_c H_d$
- POS \Rightarrow $H_a H_c$
- POS \Rightarrow $H_a H_d$
- POS \Rightarrow $H_b H_c$
- POS \Rightarrow $H_b H_d$

POS
 $4C_2 = 6$



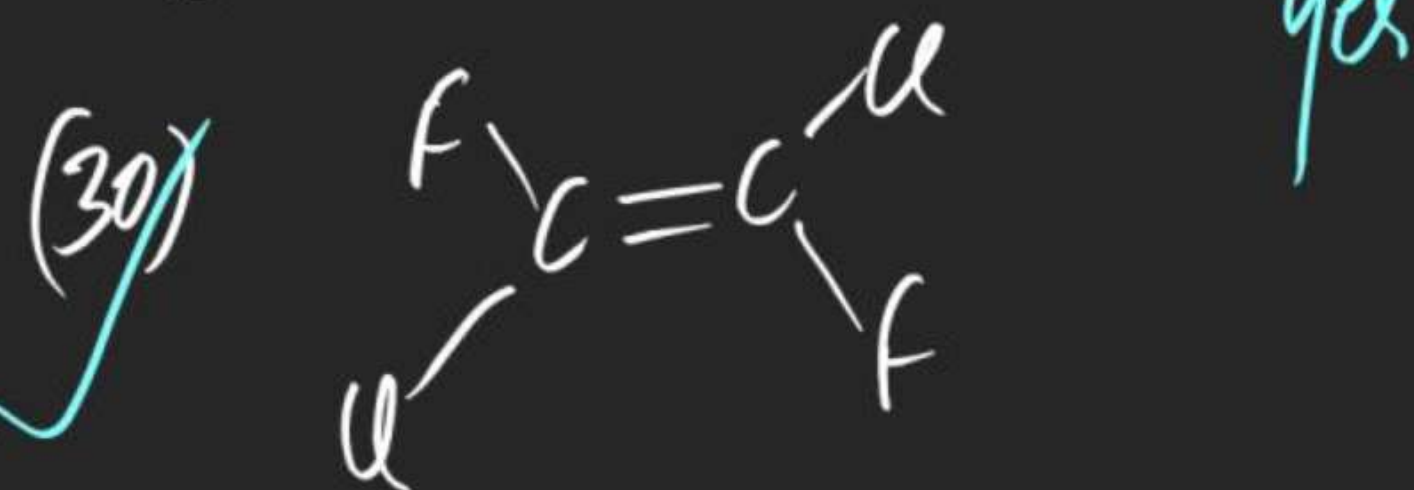
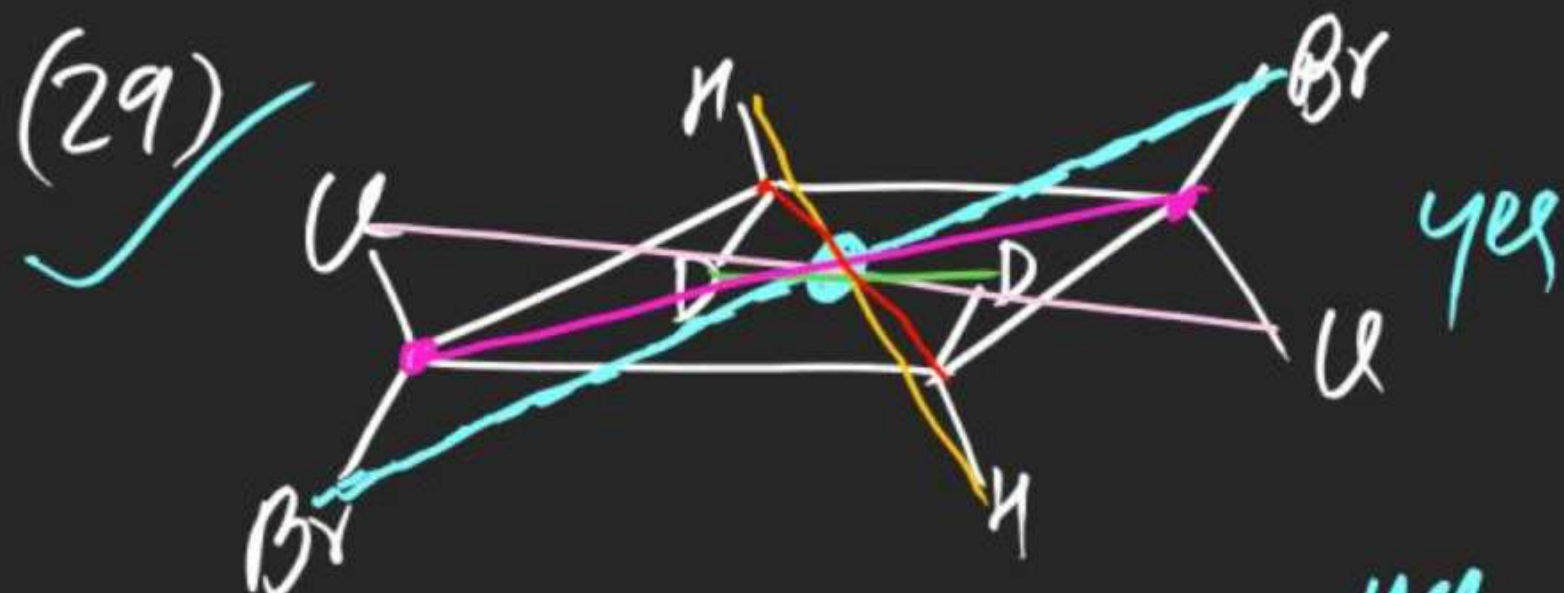
- POS \Rightarrow $H_a Cl$
- POS \Rightarrow $H_b Cl$
- POS \Rightarrow $H_c Cl$



(POS = 2)

(#) Centre of Symmetry / Centre of Inversion

It is defined as a Imaginary point across which whole compound is inverted.



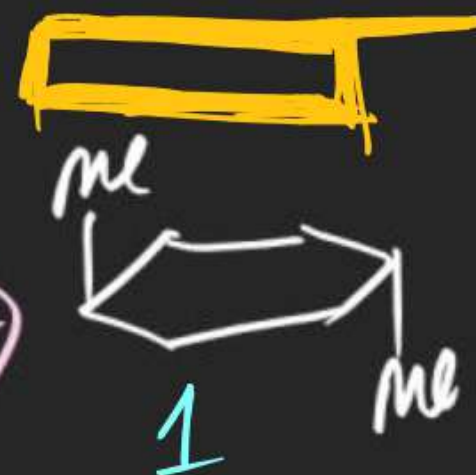
POS COS

1

NO



NO

NO COS

yes

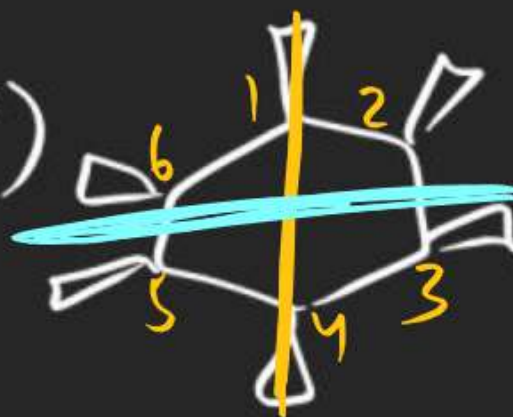
POS COS



1

NO

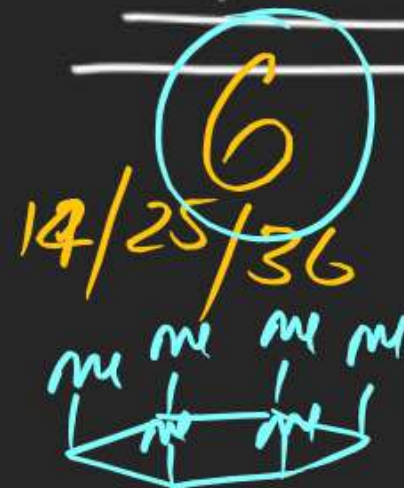
(39)



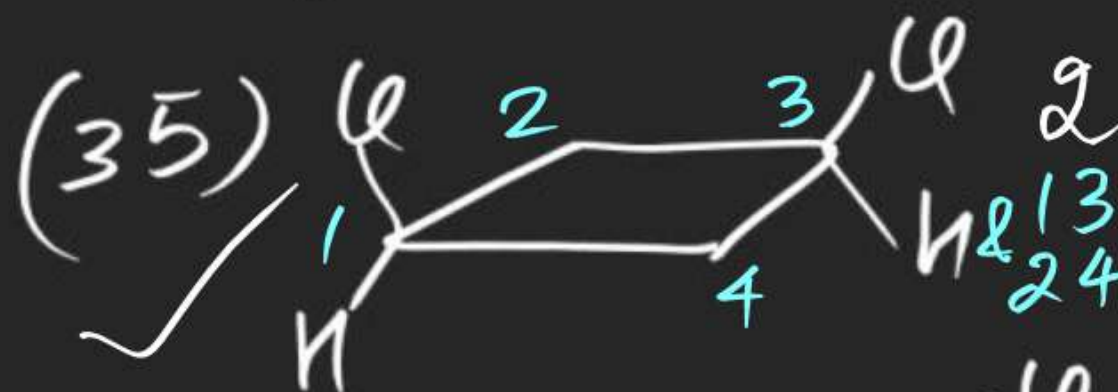
POS

COS

AOS



NO

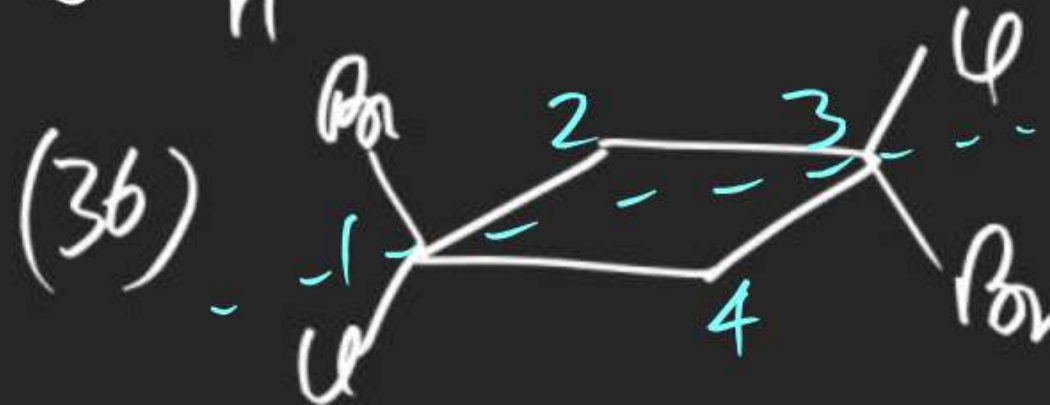


NO

(40)

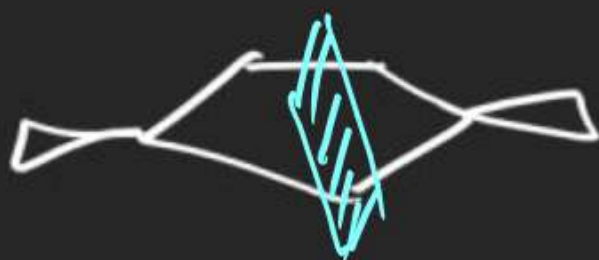


yes



1

(37)



1

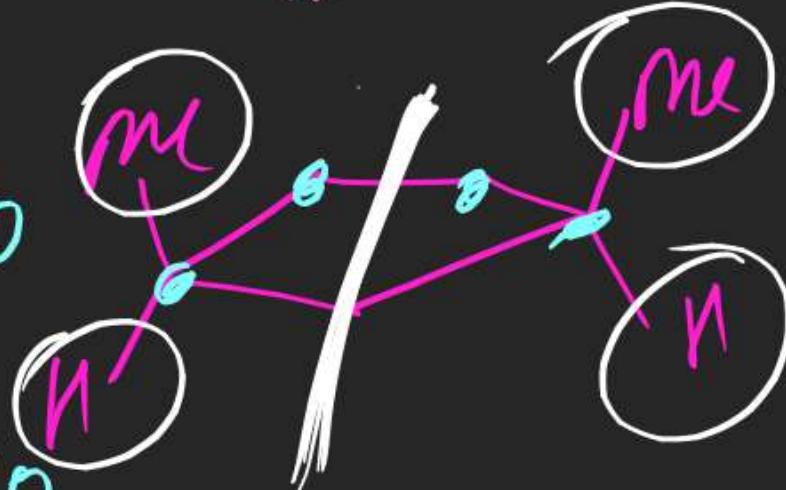
NO

(38)

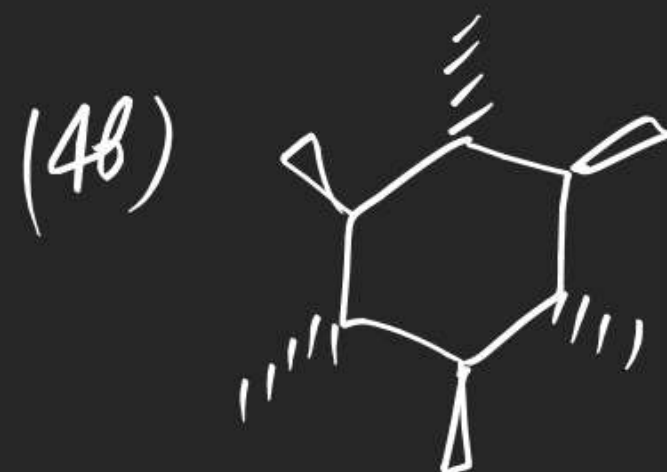
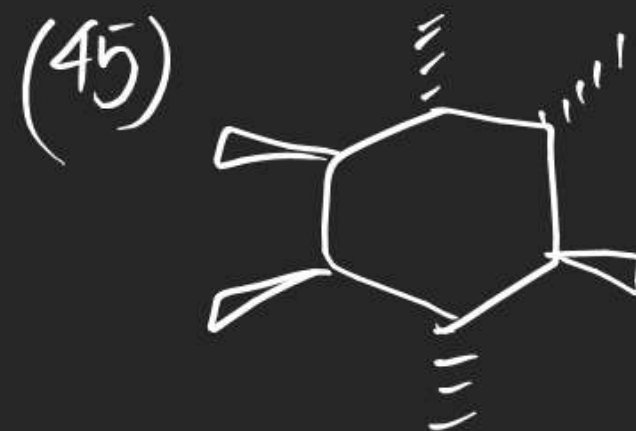
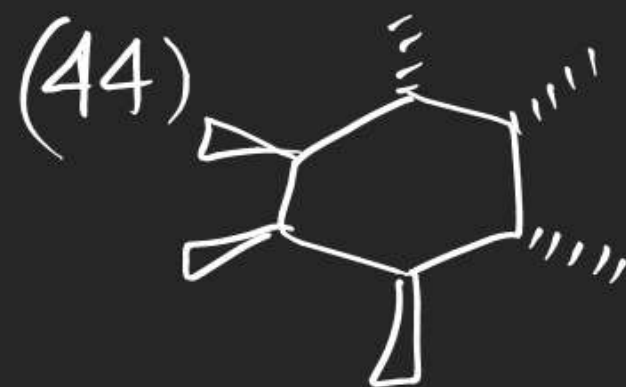
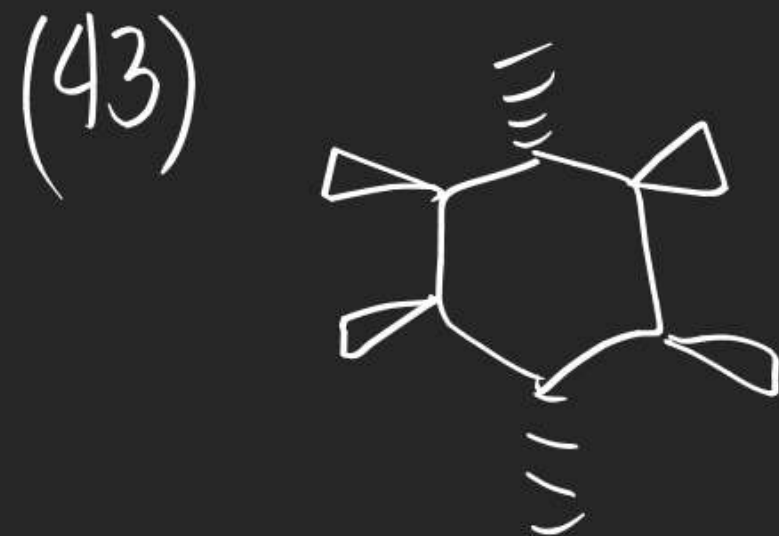
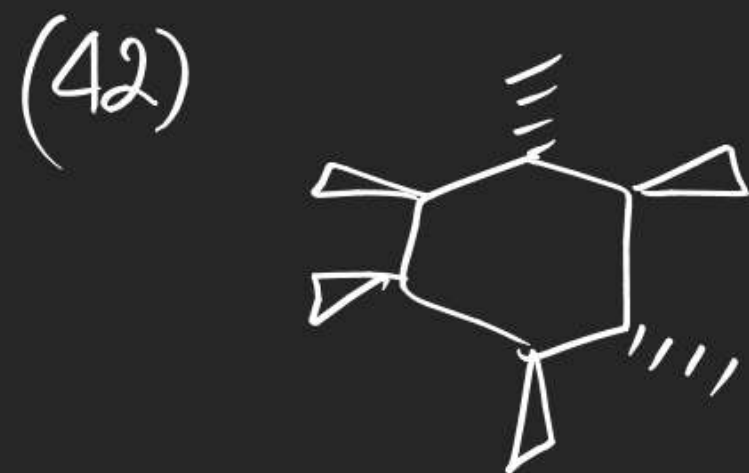
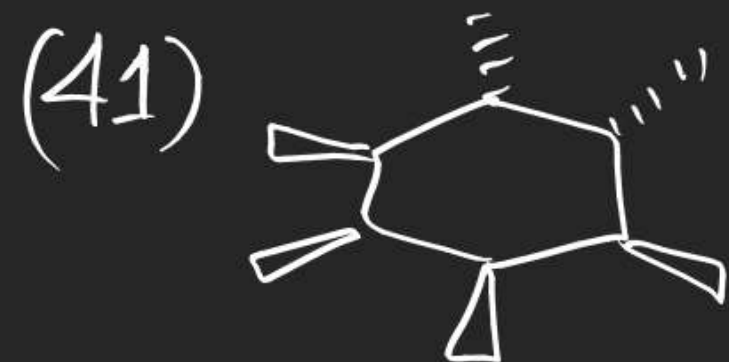


0

NO



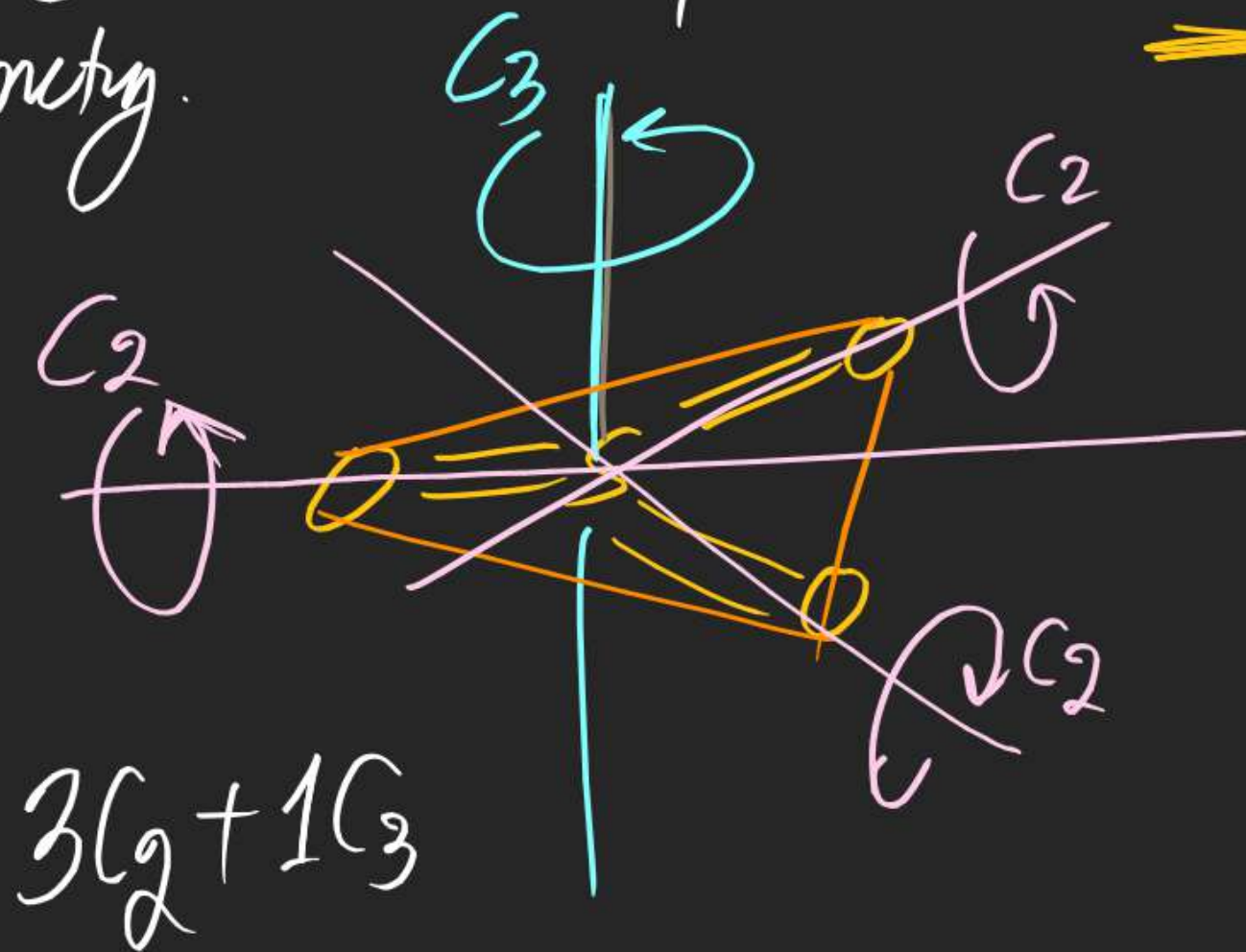
STEREISOMERISM



(#) Axis of Symmetry (A.O.S)

It is defined as a Imaginary line Across which a molecule is Rotated By $\left(\frac{360}{n}\right)^\circ$ & if Same appearance is obtained then that line is known as C_n AOS (or) n -Fold Axis of Symmetry.

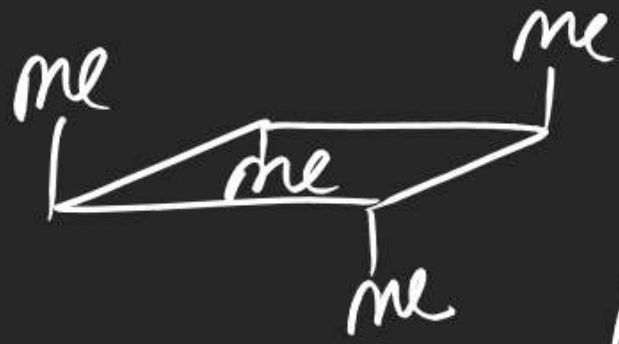
(47) SO_3



$\left(\frac{360}{n}\right)^\circ$	C_n
360°	C_1
180°	C_2
120°	C_3
90°	C_4
72°	C_5
60°	C_6
\vdots	\vdots

STEREISOMERISM

(48) ✓

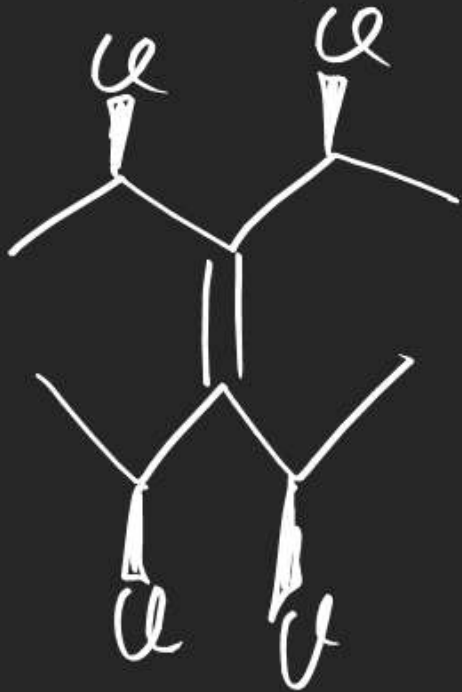


⇒ POS | COS | ADS
2 NO 3C₂
(Across Diagonal)

(49)



(50)



(51)



(52)



(53)

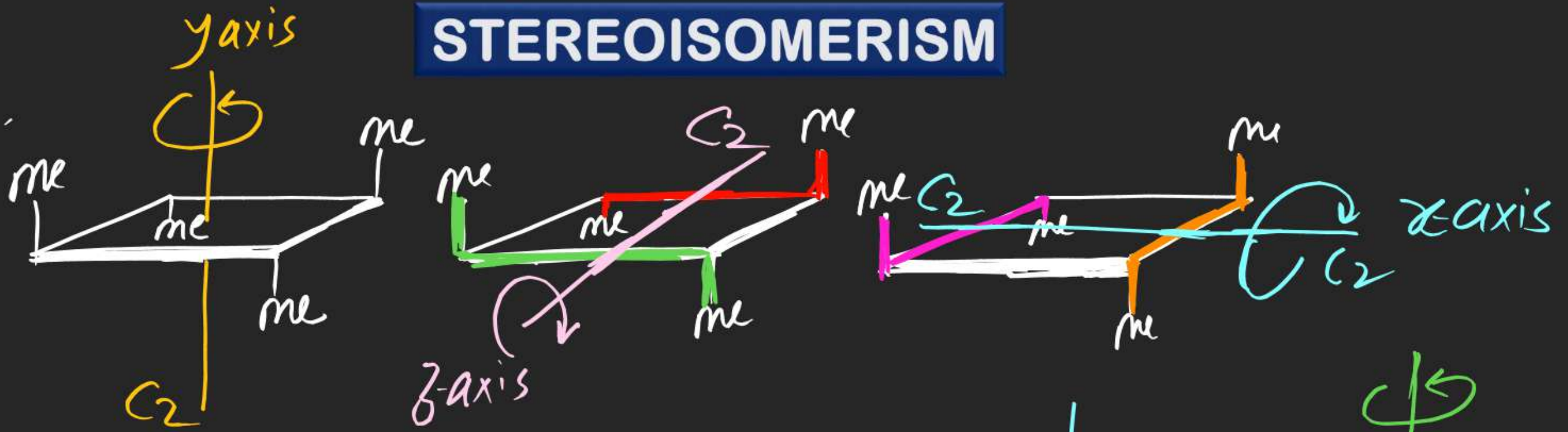


(54)

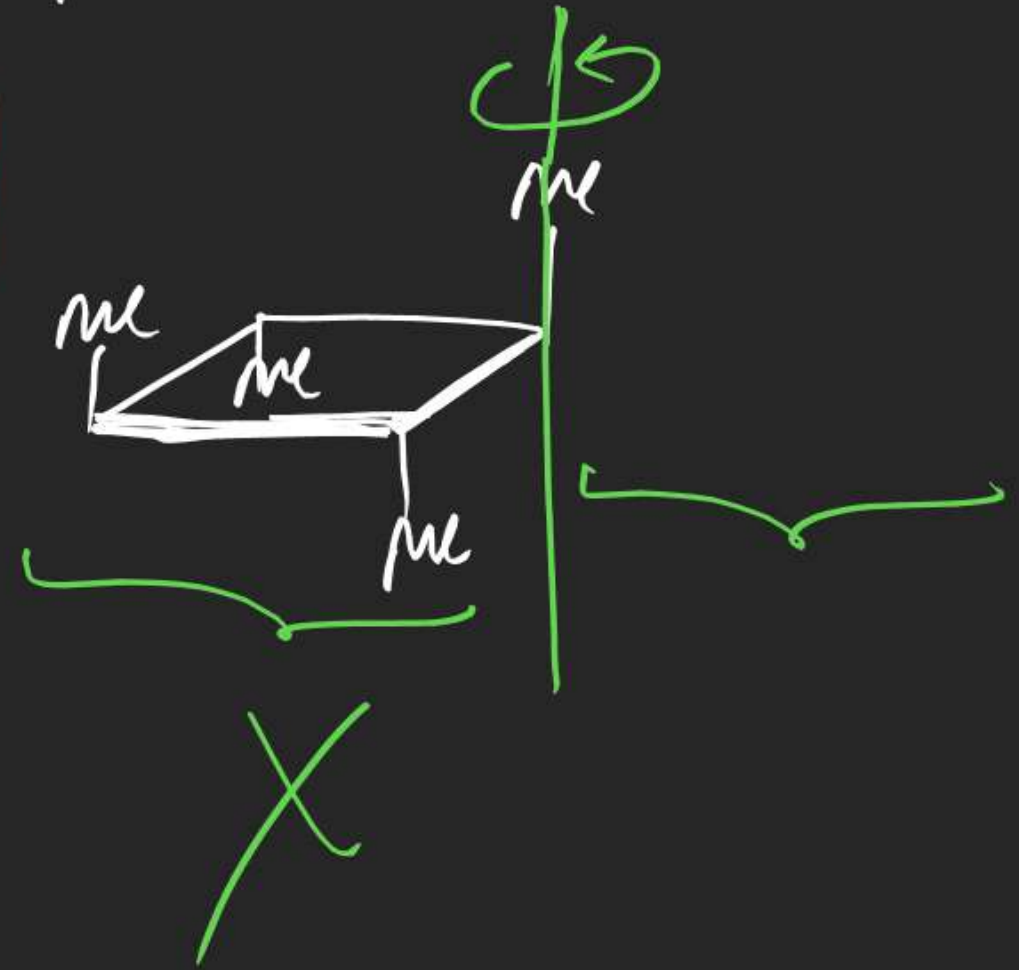


STEREISOMERISM

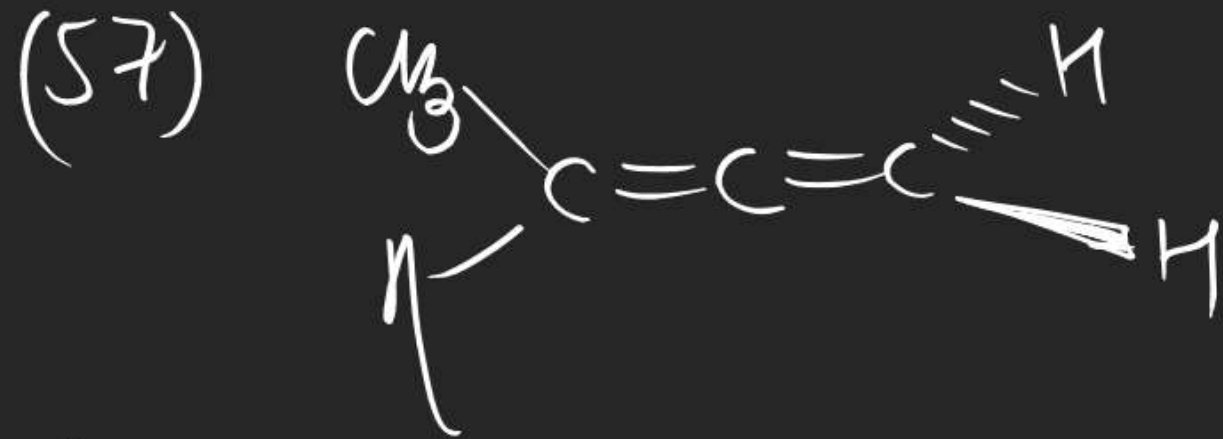
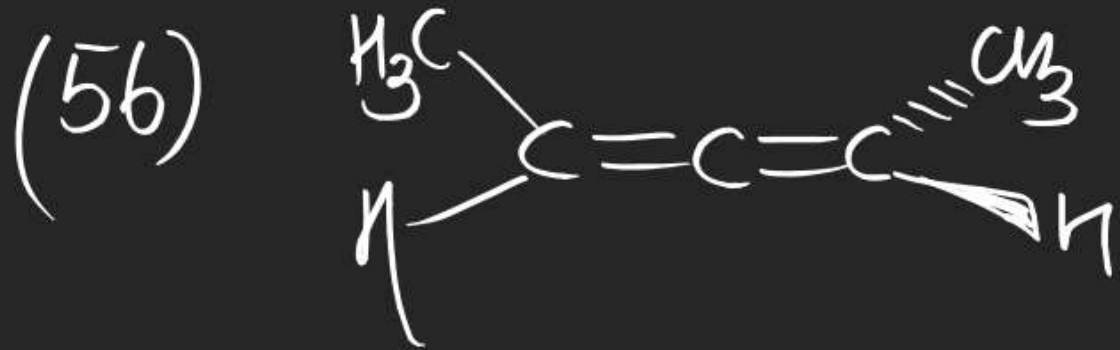
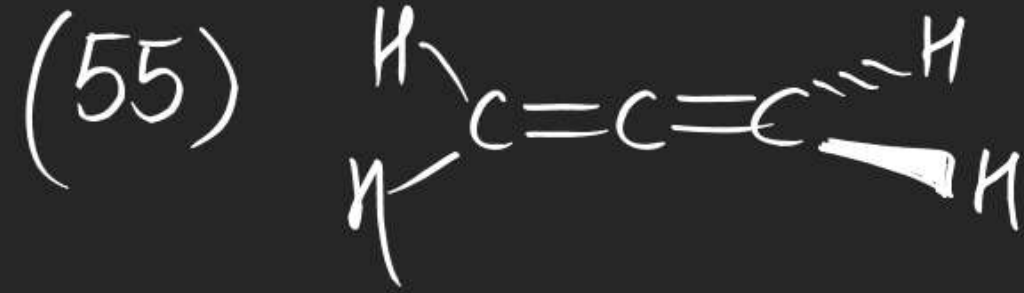
Solⁿ (40).



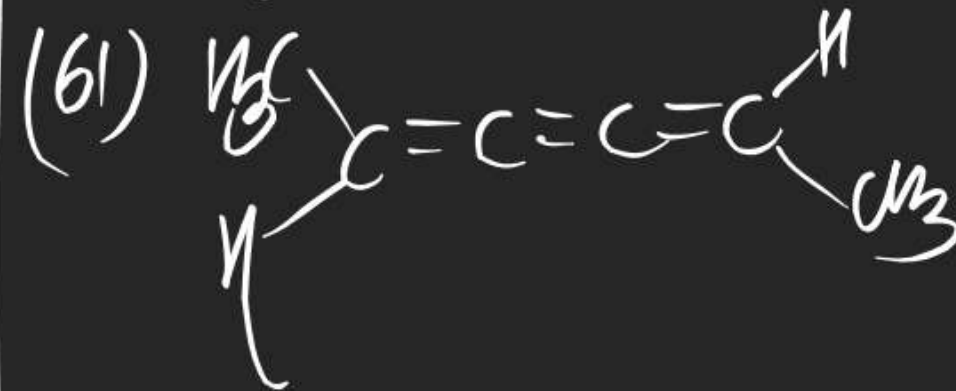
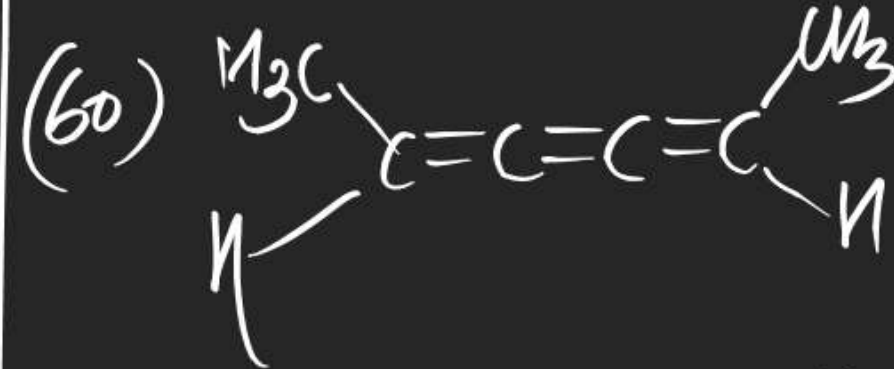
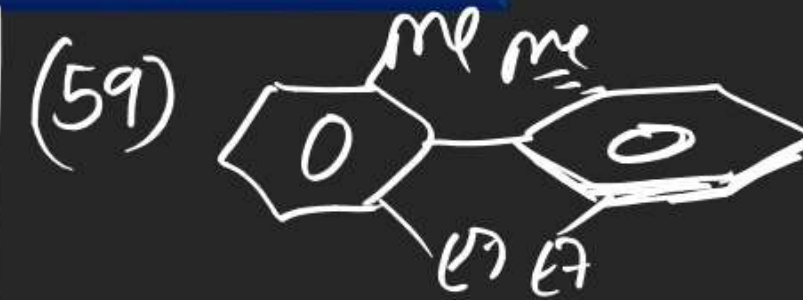
different appearance.



STEREISOMERISM



POS/LOS/AOS

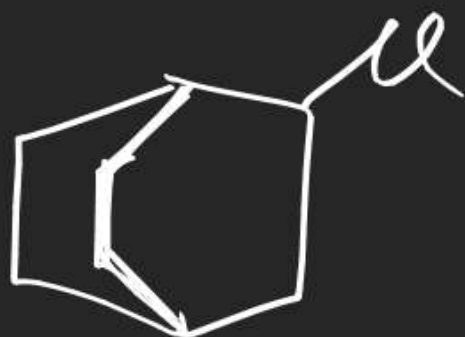


STEREISOMERISM

(63)



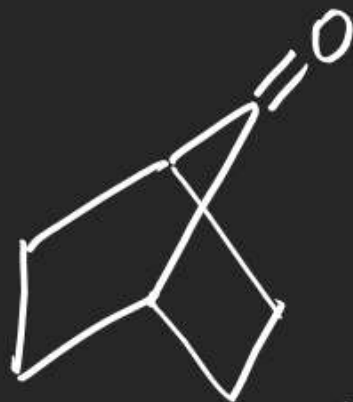
(64)



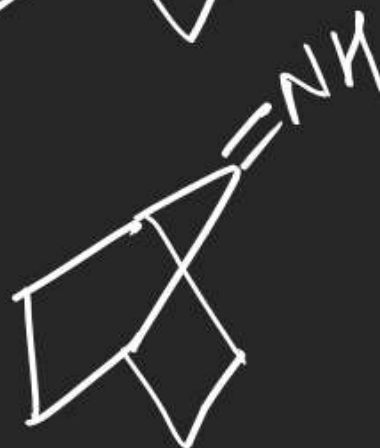
(65)



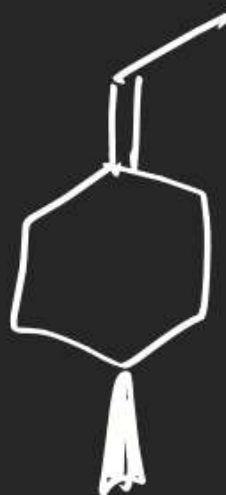
(66)



(67)



(68)



STEREISOMERISM

(#) Alternating Axis of Symmetry :- (AAOS)

STEREISOMERISM

- HW
- (i) Theory copy
 - (ii) structural isomerism sheet (1-50 Questions)