R/S Configuration.

1) "chiral center" ⇓ Point chirality.

2) "chiral axis" ⇓ "Axial chirality".

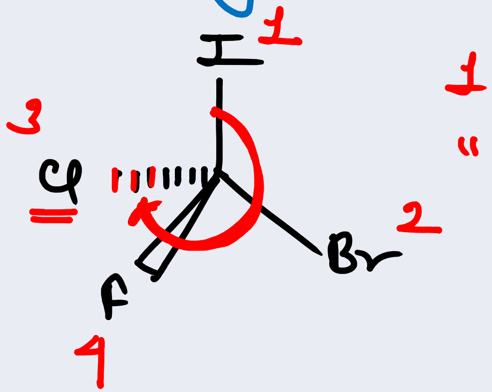
3) "chiral plane" ⇓ "Planar chirality".

Chiral center.

Wedge-dash form.

Rule ① - If 4th Priority is on ||||||| (dash) then ↻ R ↺ S

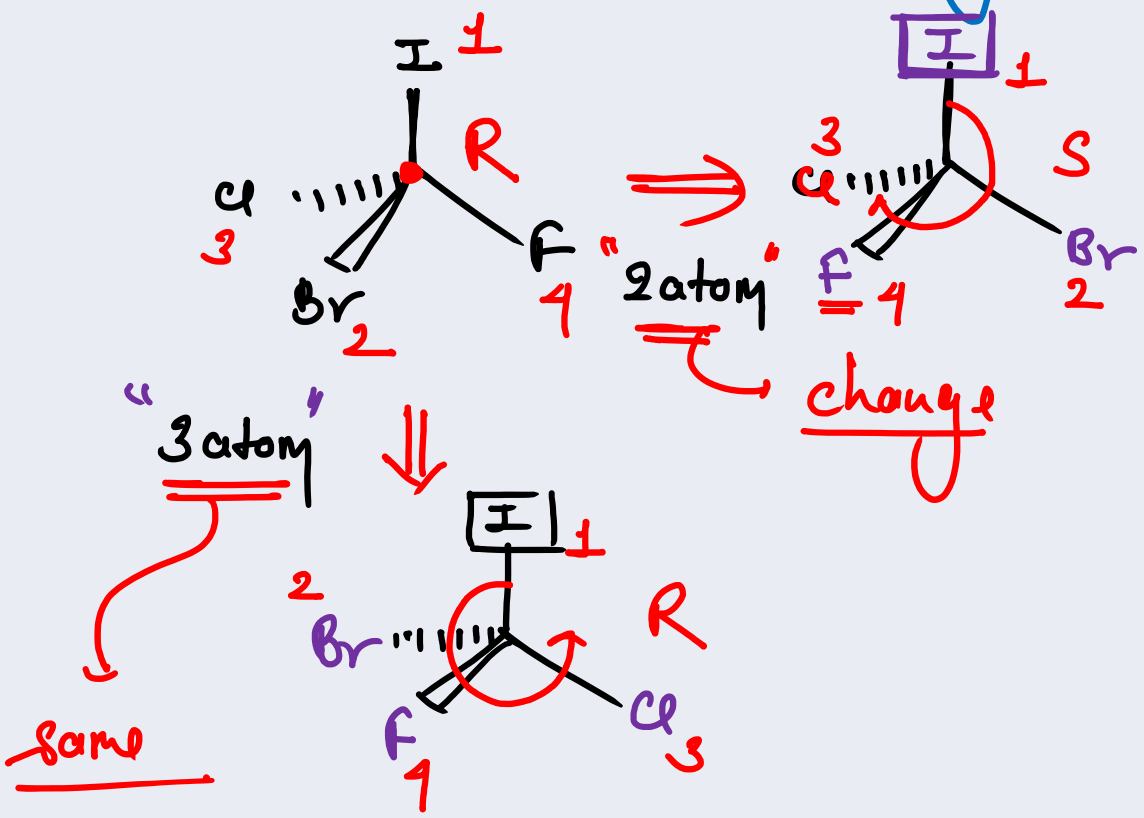
If 4th Priority is on ◁ (wedge) then ↻ S ↺ R

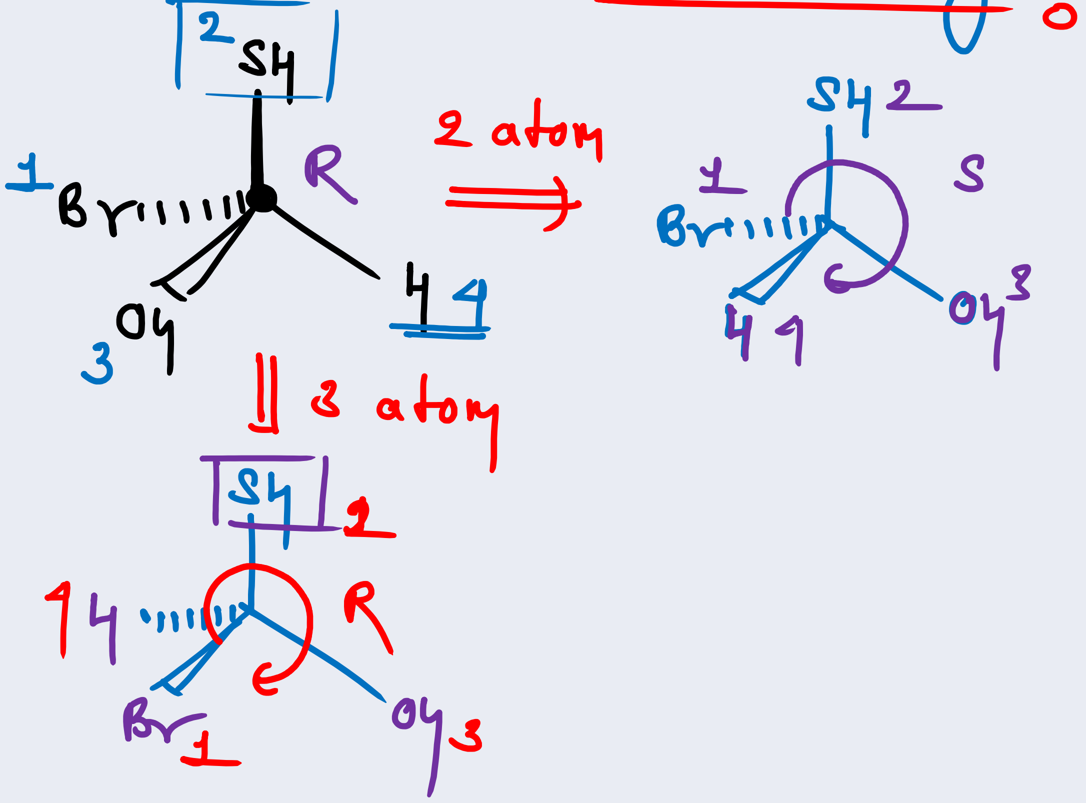


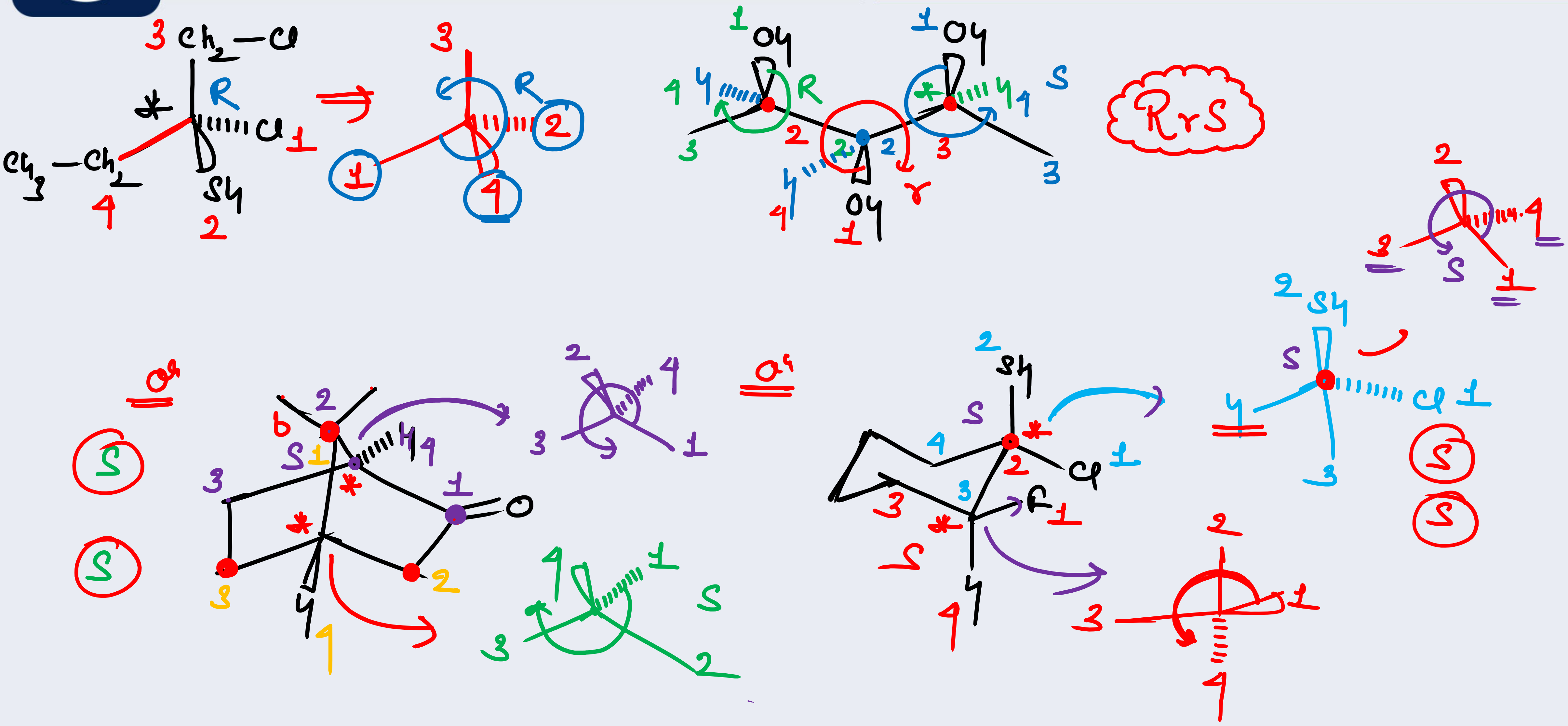
1 → 2 → 3

"S"

Rule ⑪ When 4th priority is in plane then we need to do interchange



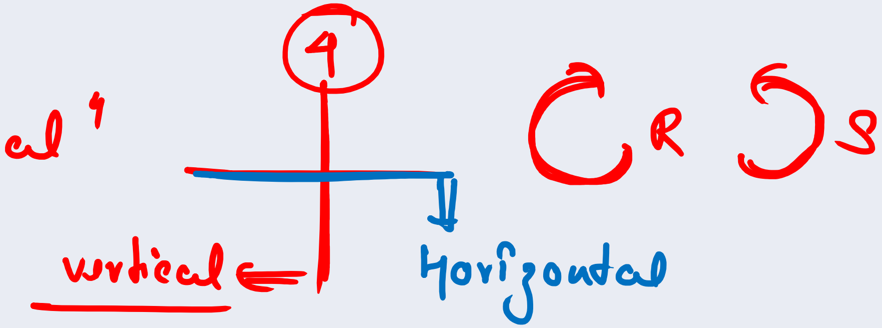




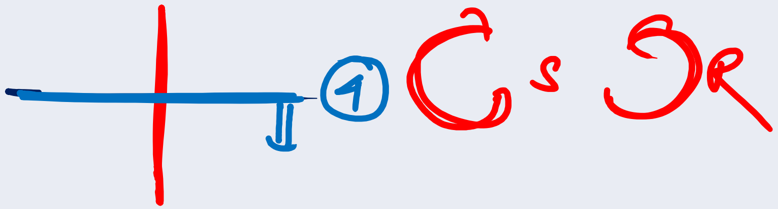
3 CH2—Cl
R
*
Cl 1
CH3—CH2
SH
4
2
3
R
2
1
4
1 OH
4 H
R
2
3
2
2
H
4
OH
1
r
1 OH
H 4
S
3
3
RrS
2
4
3
S
1
or
S
S
2
b
S 1
3
H 4
*
*
1
O
3
2
H
4
2
4
3
1
4
1
S
3
2
or
2
SH
S
4
*
Cl 1
2
3
F 1
3
*
S
H
4
2 SH
S
H
Cl 1
3
S
S
2
3
1
4

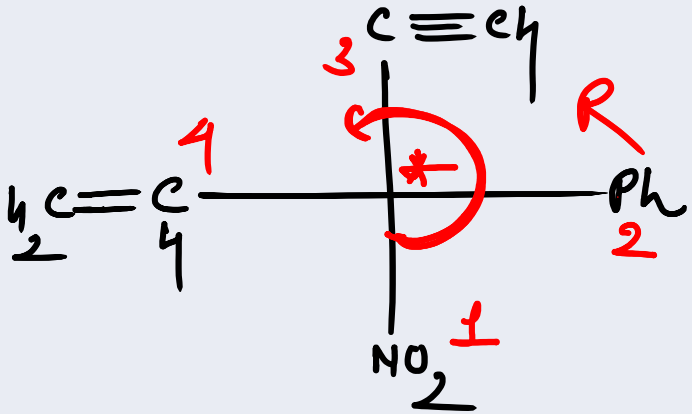
⑪ Fischer Projection

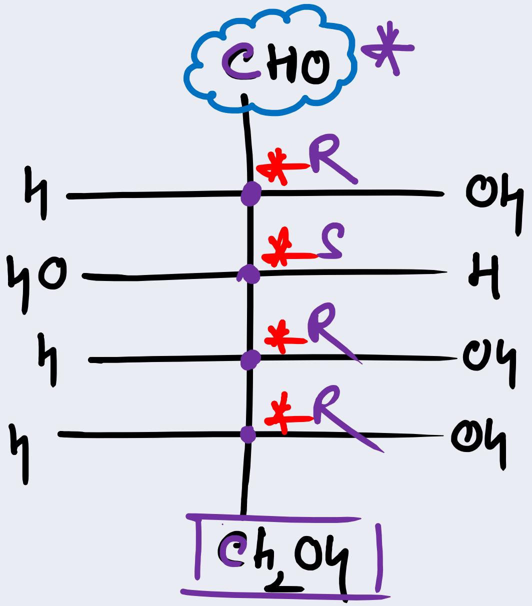
Rule ① ⇒ 4th Priority "vertical"



4th Priority "Horizontal"







(Glucose)

Trick

* 1) Most oxidised group should be on top.

* 2) Max. no. of carbons should be on vertical chain

Right — (OH) R

(OH) — (Left) S

② Chiral axis*

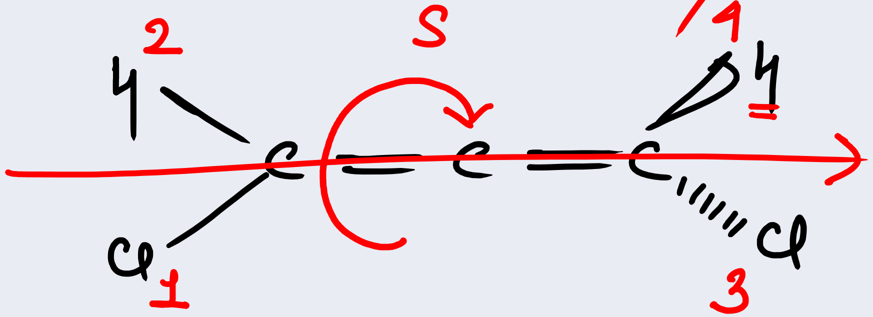
"Allenes"

n (no. of π-bond)

⇓

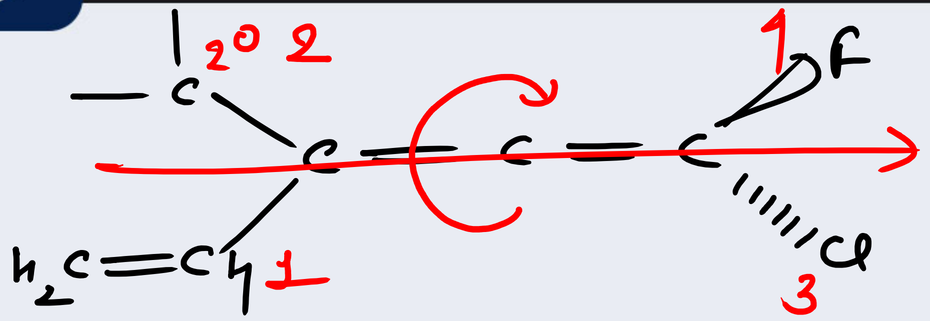
"odd" ⇓ *same plane ⇒ ~~E/Z~~ *

"Even" ⇓ ⊥r ⇒ R/S

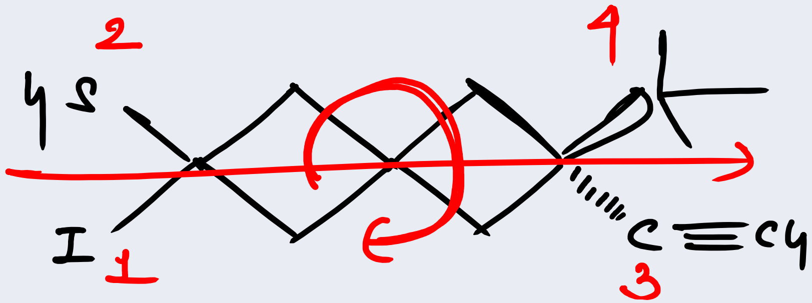


1) Draw chiral axis from planar side to non-planar side

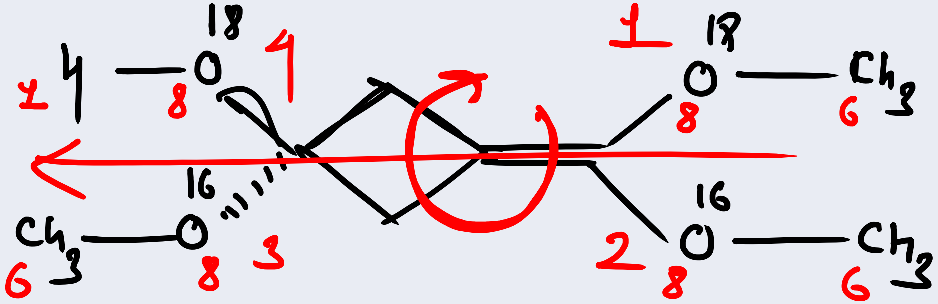
2) 1st give priority on planar side.


2°
2
1
F
C
C
C
C
H2C=CH
1
Cl
3

S

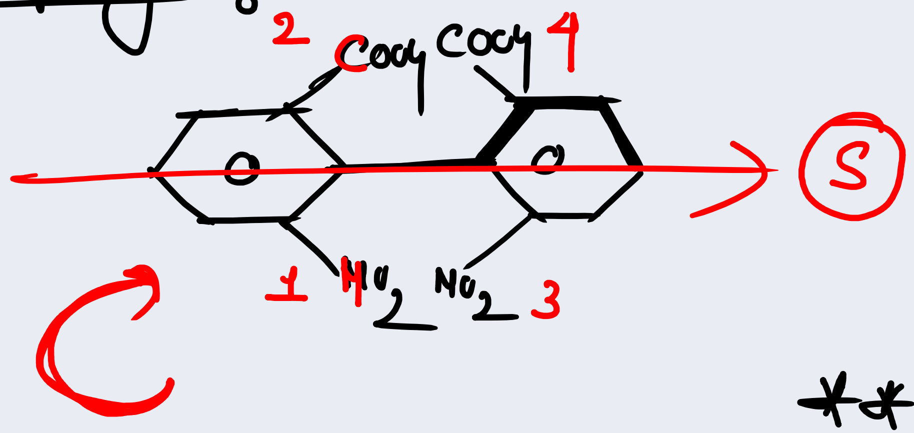

2
HS
4
I
1
C≡CH
3

S

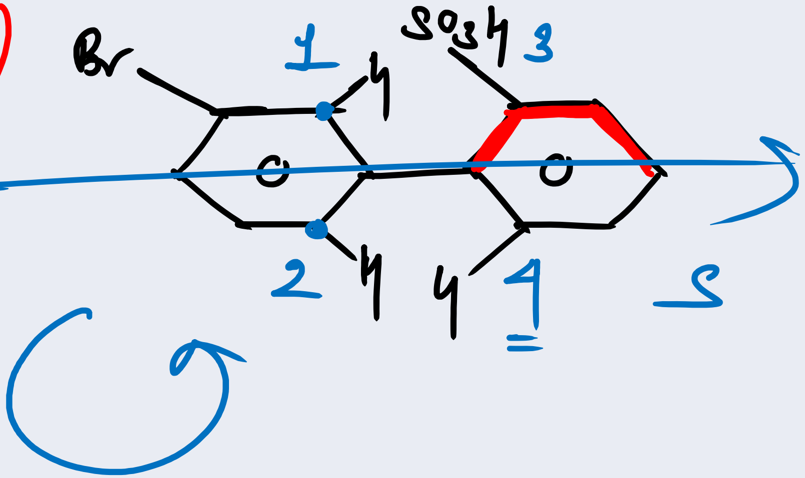

18
4
H
1
O
8
1
18
O
8
CH3
6
16
CH3
6
O
8
3
2
16
O
8
CH3
6

S

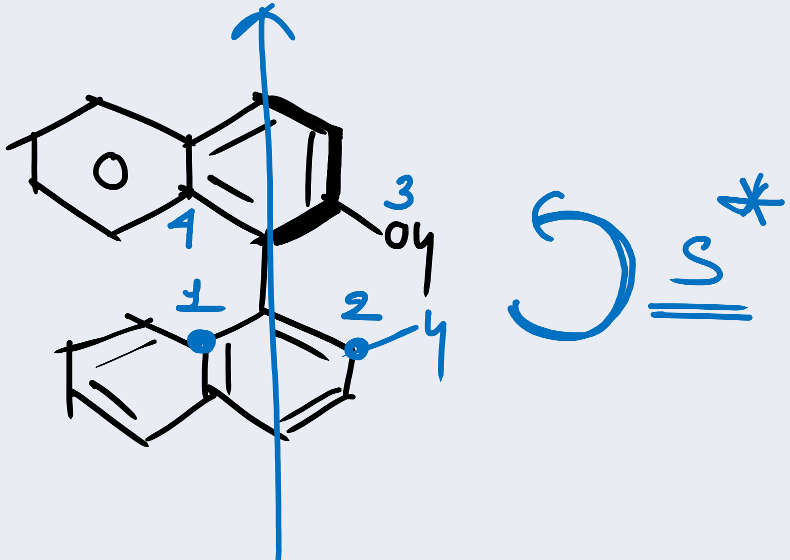
Biphenyls



2)



3)



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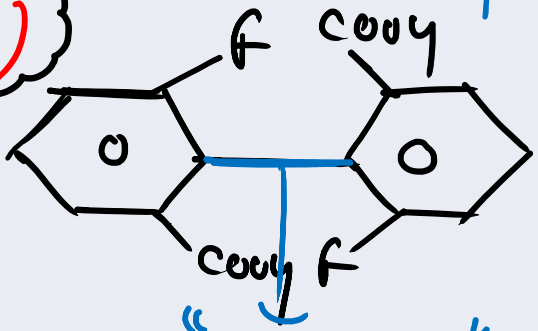
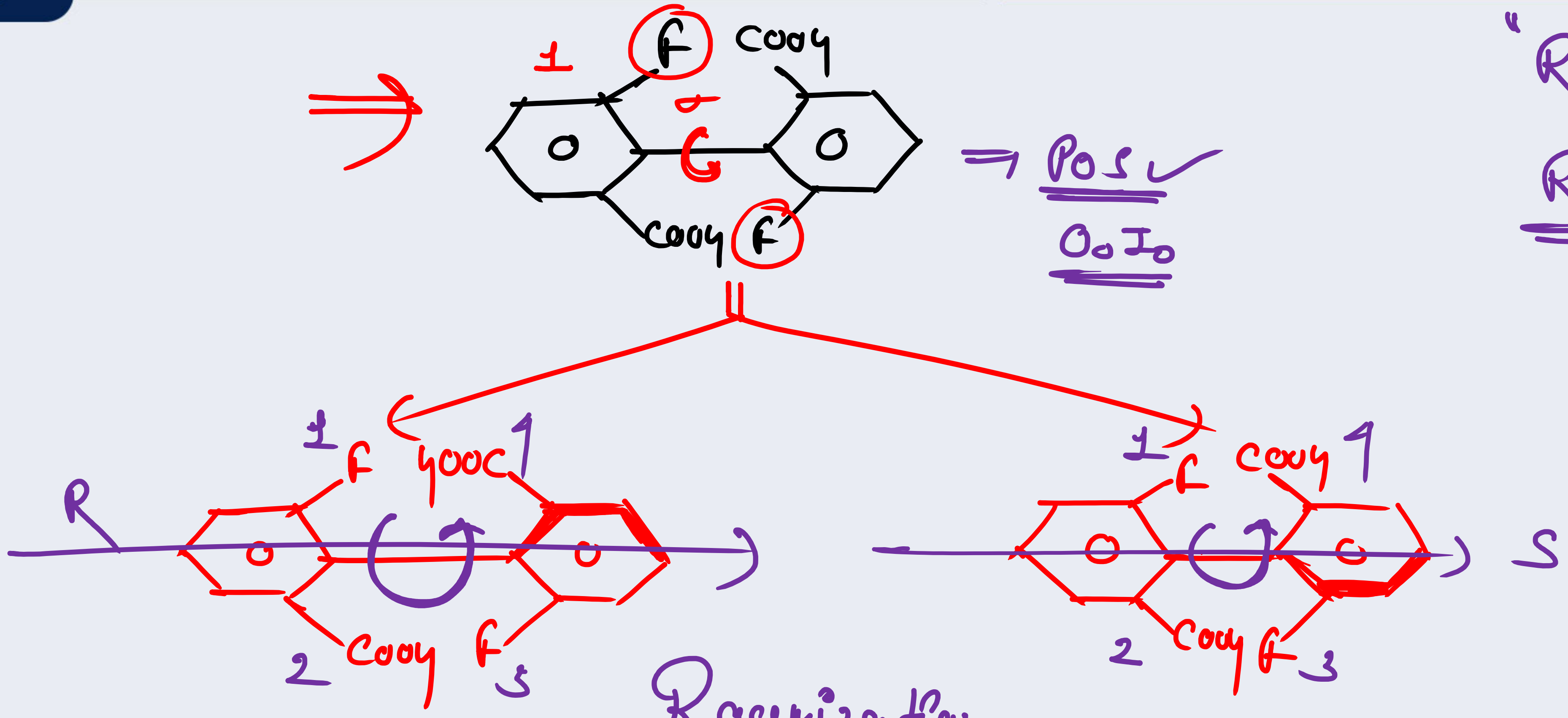
4)



“σ-bond”

Rotation



⇒ Pos ✓

O.I.

"R ≡ S"

⇓

Racemic mix

⇓

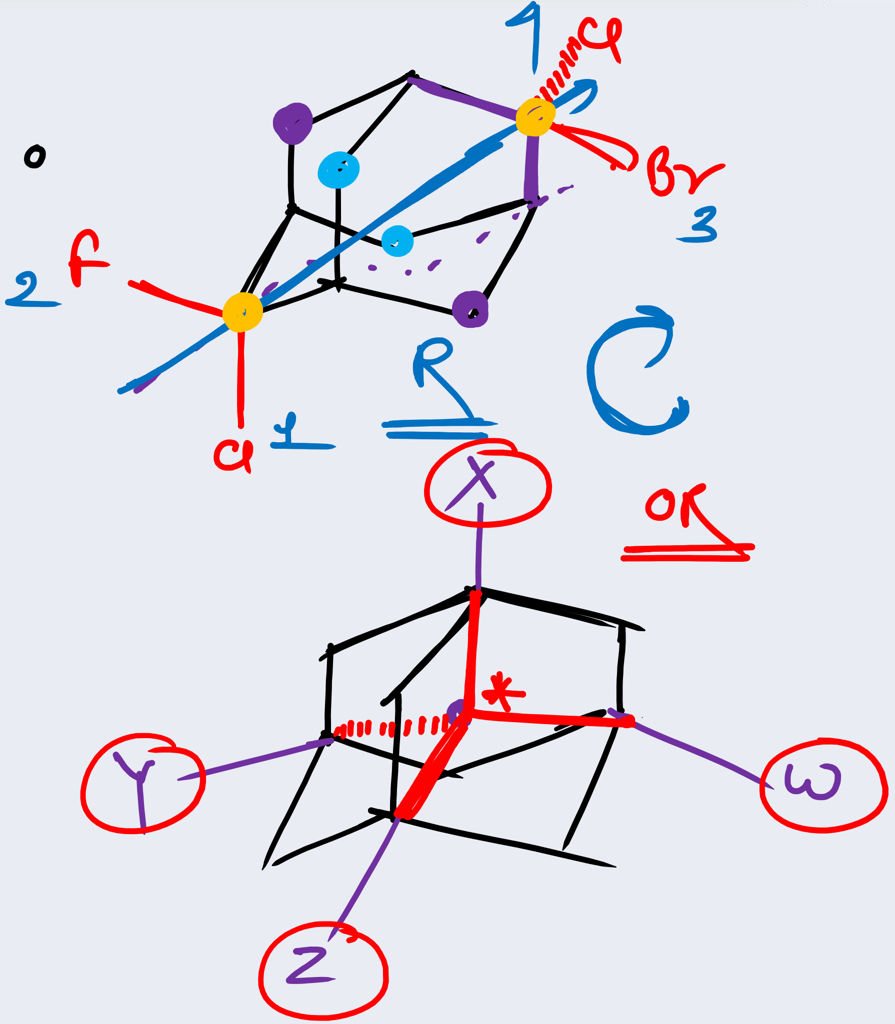
$\boxed{\text{O.I.}}$

Racemization

⇓

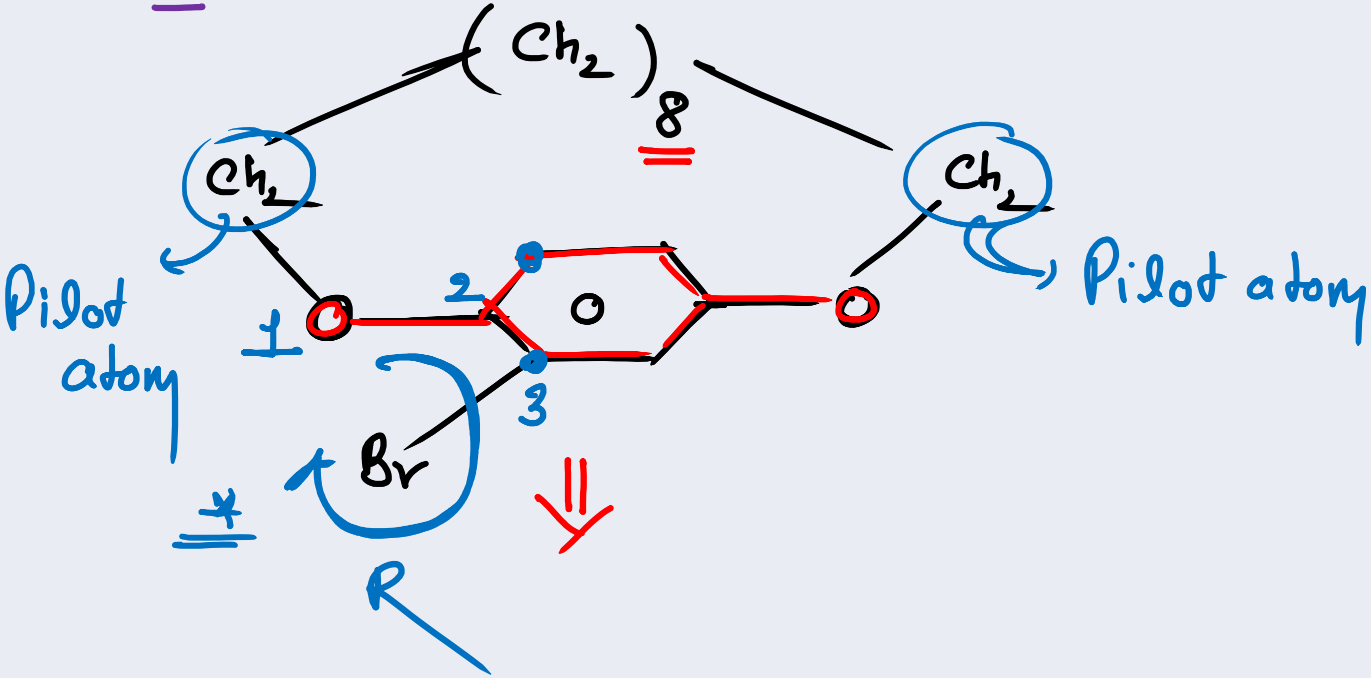
"Yo-Yo Rotation" ⇒ O.I.

Admantane

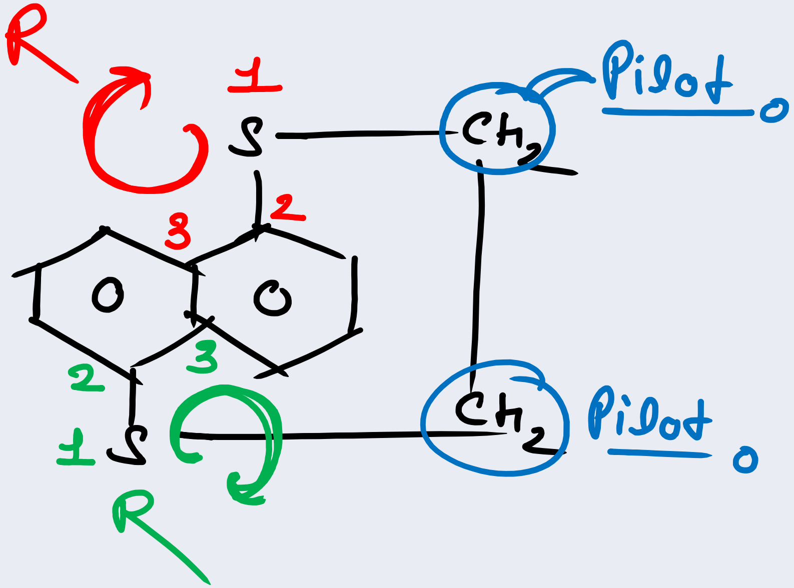


“Ansa componds” “R/S”

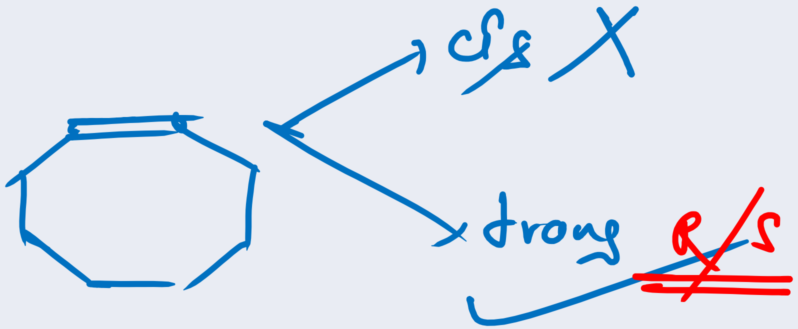
Q.

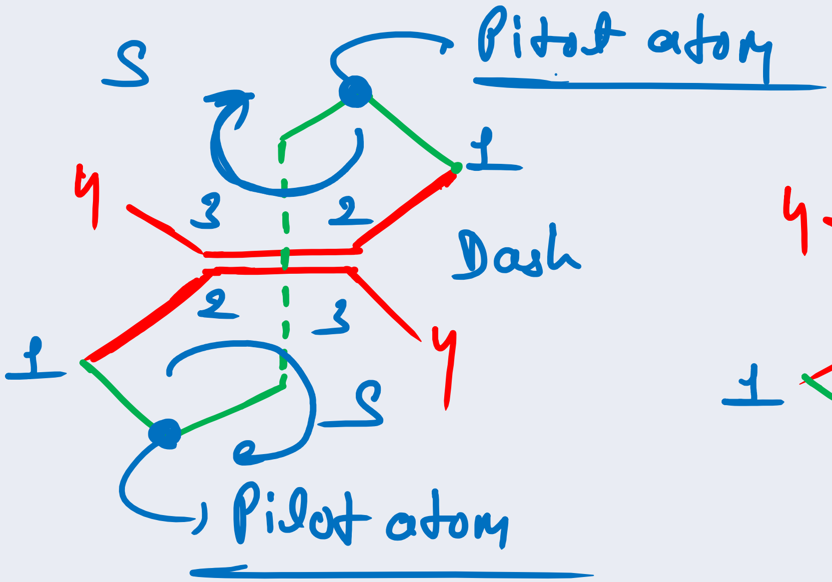


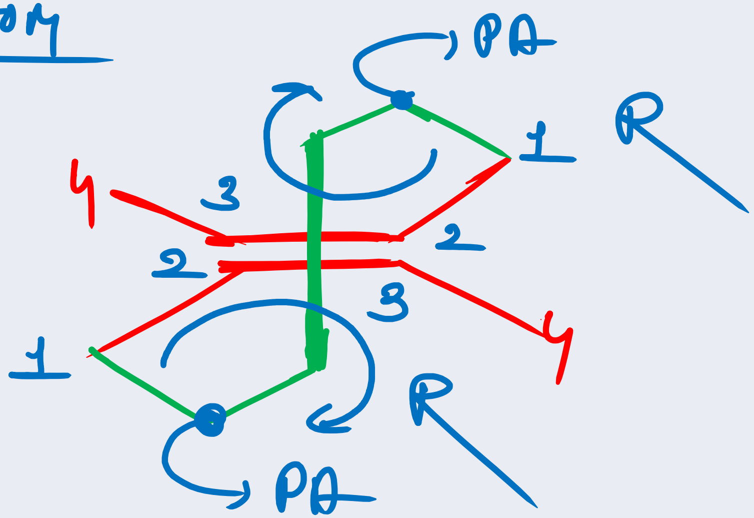
Q.



Alkene *


cis
X
trans
~~R/S~~


S
Pivot atom
1
4
3
2
Dash
2
3
1
4
S
Pivot atom


PA
1
R
4
3
2
2
3
4
1
R
PA