

W.CERT

42 hrs

① → Daily Revise
W.CERT

Gaurav Soni
AIR-1149
IIT → 2008
JEE

O.C
T.O.C

6 hrs

② Daily H.W
PVA

1 hr

50 min
10 min

Biology

25-5
25-5

Reg NTA Abhyas

6 hr
4 hr
7 hr
3 hr

20 hrs

4 hrs
2 hr

20

Optical Isomerism

- ① Chain
- ② Position
- ③ F.G
- ④ Metamers ✓
- ⑤ Ring chain
- ⑥ Tautomers

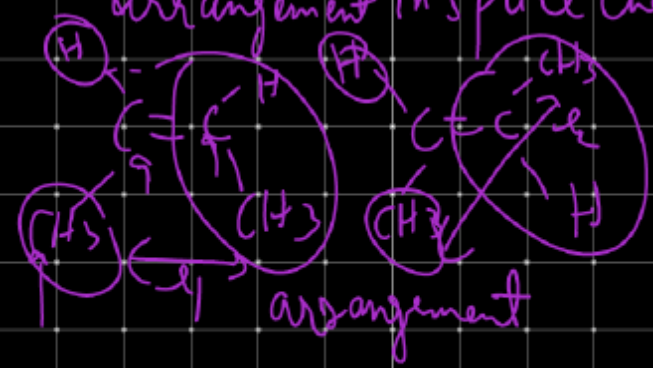
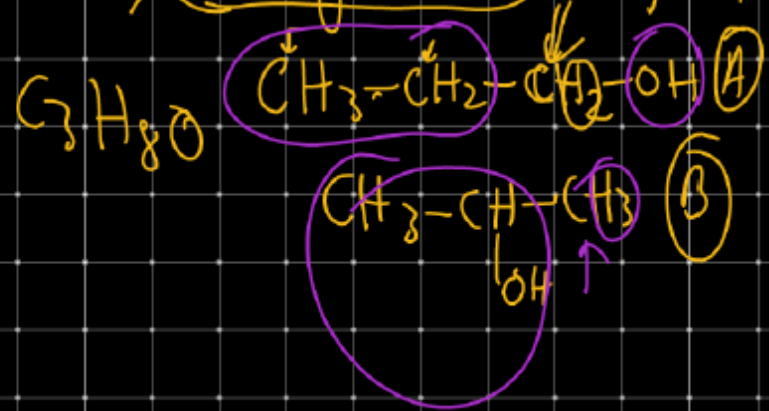
Isomers → Two or more compounds
Same M.F but diff. structures

Structural Isomers / Constitutional Isomers / Regio Isomers

Stereoisomers → G.I
O.I

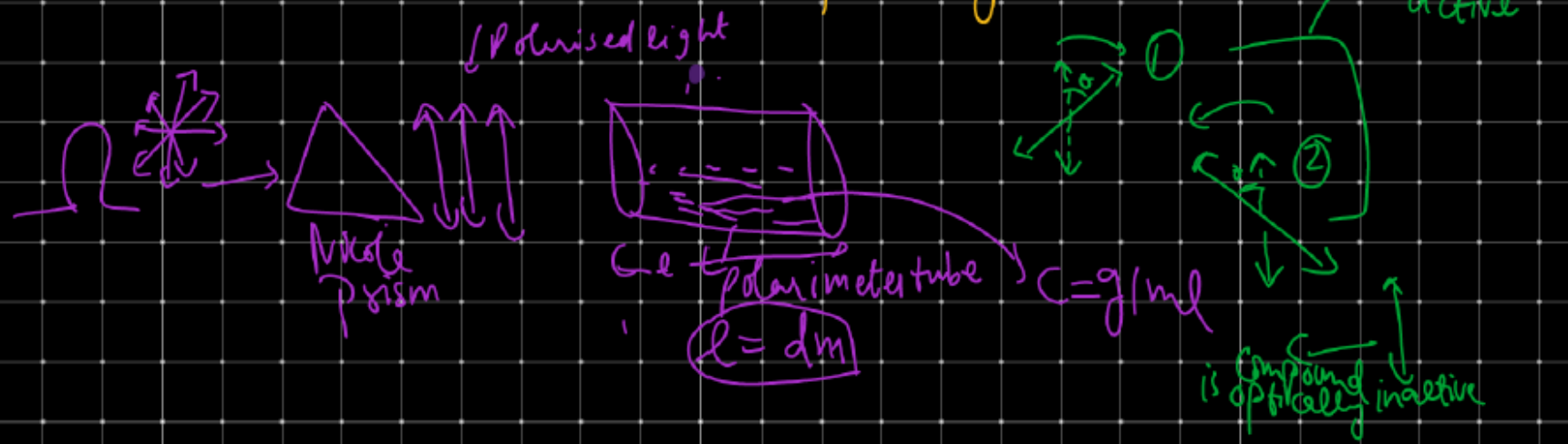
* Bonding pattern same
arrangement in space changes

1) Bonding Pattern changes



Optical Isomerism

Chirality / Asymmetry
Property of \Rightarrow Compound due to which it has Non Superimposable M.I
 \Leftarrow Chiral Compounds \rightarrow have non S.I M.I
 \rightarrow are optically Active



Optically Active $\left\{ \begin{array}{l} \text{Clockwise direction} \rightarrow \text{dextrorotatory compound 'd' / (+)} \\ \text{Anticlockwise } \rightarrow \text{levorotatory } \text{'l' / (-)} \end{array} \right.$

d & l \rightarrow relative configuration

Compound is chiral \rightarrow It is asymmetrical
 \rightarrow It has non S.I.M.I
 \rightarrow It will rotate P.P.L
 \rightarrow It is optically active

Specific rotation \rightarrow rotation in degrees observed when
PPL is passed through a polarimeter tube
of length 1 dm having chiral compound

Solution with conc of 1 g/ml

$$c = 1 \text{ g/ml}$$

$$l = 1 \text{ dm}$$

$$\alpha_{\text{specific}} = \alpha_{\text{observed}}$$

$$\alpha_{\text{specific}} \times c \times l = \alpha_{\text{observed}}$$