

* R.S Nomenclature Date _____

R means rectus means

moving clockwise from 1 $\rightarrow$ 2 $\rightarrow$ 3

(not 4th) and the basis of Priority order or seniority

order S means sinister means moving anticlockwise 1 $\rightarrow$ 2 $\rightarrow$ 3 (not 4th)

on the basis of Priority order or seniority order *

— For R.S nomenclature smallest priority group/atom must be present at bottom.

— If smallest group present horizontally or at top then must taken at bottom by rotating or exchange bond.

— When smallest group present at top then exchange by 180°

— When smallest group present horizontally then exchange at 90°

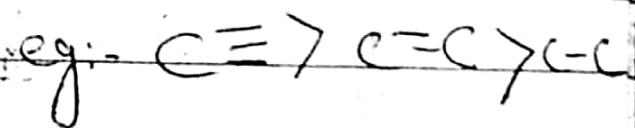
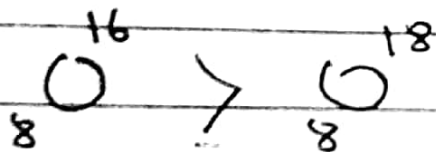
— When smallest group present at dotted line then R.S nomenclature remain same or intact.

When Smallest group present at Thick line then R's nomenclature becomes opposite i.e., S converted into R and R converted into S

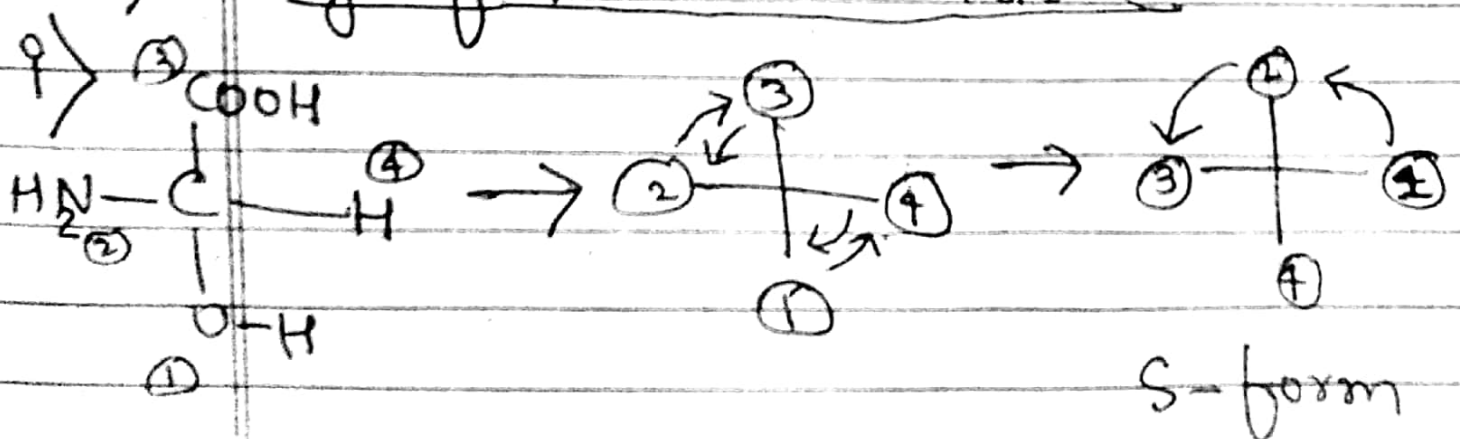
Factor affecting Priority order / Seniority order

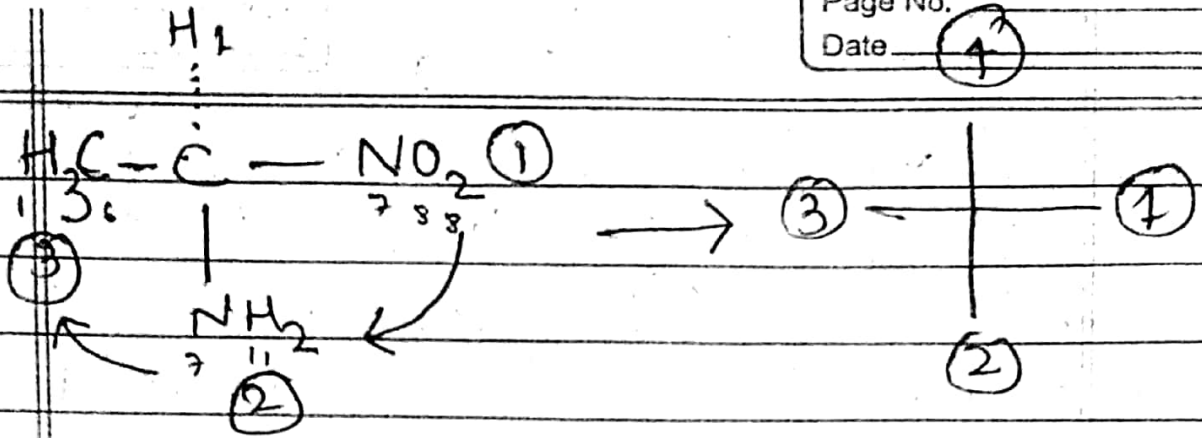
- i) Priority order $\uparrow$ with $\uparrow$ atomic number
- ii) Priority order $\uparrow$ with $\uparrow$ multiplicity of bond ($\equiv$ bond $>$ $=$ bond $>$ $-$ bond)
- iii) Priority order of ring is greater than chain
- iv) For isotope priority order $\uparrow$ with $\uparrow$ atomic weight

eg:-

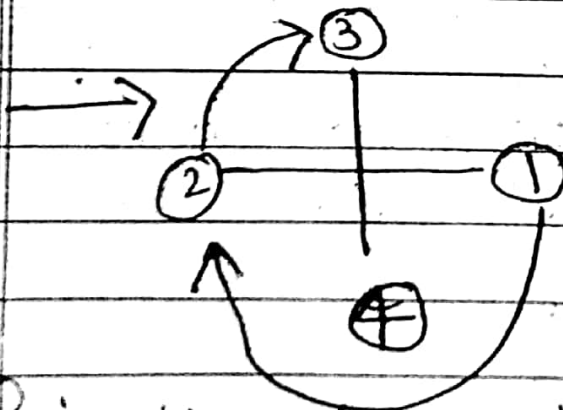
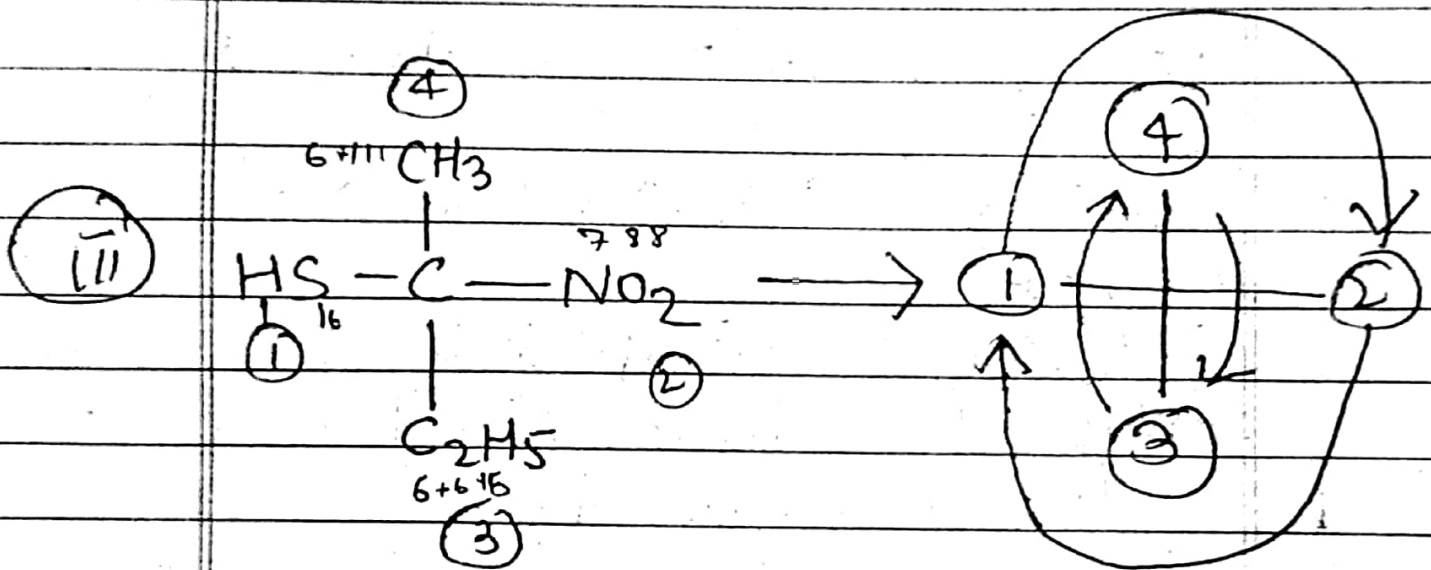


$\Rightarrow$ eg of R's nomenclature





R-form



- Priority of cyclo comp. is greater than chain comp.

