

Type-MCQ

Q1. The Grunwald-Winstein equation is

1. $\log(K_X/K_H) = \rho\sigma$
2. $\log(K_{t\text{-BuCl, sol}}/K_{t\text{-BuCl, 80\%EtOH, 20\%H}_2\text{O}}) = \rho$
3. $\log(K_X/K_H) = \rho[\sigma + r(\sigma^+ - \sigma)]$
4. $\log(K_{\text{NucX}}/K_{\text{H}_2\text{O}}) = \alpha.E_n + \beta.H$

Q2. The Hammett equation is

1. $\log(K_X/K_H) = \rho\sigma$
2. $\log(K_{t\text{-BuCl, sol}}/K_{t\text{-BuCl, 80\%EtOH, 20\%H}_2\text{O}}) = \rho$
3. $\log(K_X/K_H) = \rho[\sigma + r(\sigma^+ - \sigma)]$
4. $\log(K_{\text{NucX}}/K_{\text{H}_2\text{O}}) = \alpha.E_n + \beta.H$

Q3. In Hammett substituent constant σ is negative the substituted benzoic acid is -----than benzoic acid itself.

1. more acidic
2. neutral
3. more basic
4. less acidic

Q4. In Hammett substituent constant σ is positive the substituted benzoic acid is -----than benzoic acid itself.

1. more acidic
2. neutral
3. more basic
4. less acidic

Q5. In Hammett equation, the substituted benzoic acid have electron donating group for this σ value is

1. negative

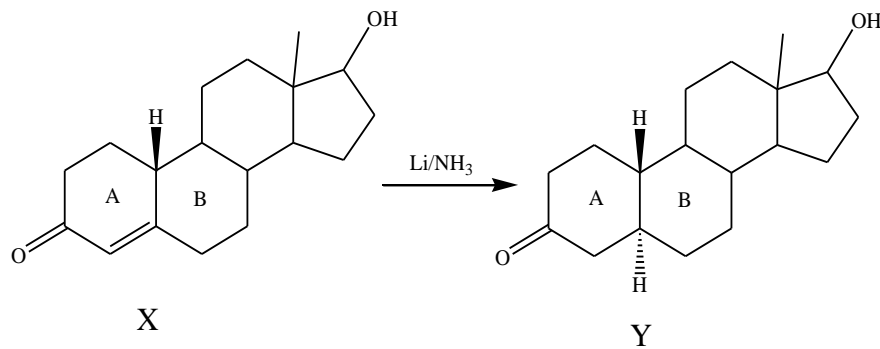
2. positive
3. zero
4. infinity

Q6. When a linearly polarised light beam passes through a dissymmetric medium, its two circularly polarized components show different indices and different absorption coefficients giving rise to two chiroptical properties of a chiral medium, known as

1. Circular dichroism
2. Circular birefringence
3. Electromagnetic transition
4. Electronic transition

Q7. 2- and 3-oxocholestanone exhibit a

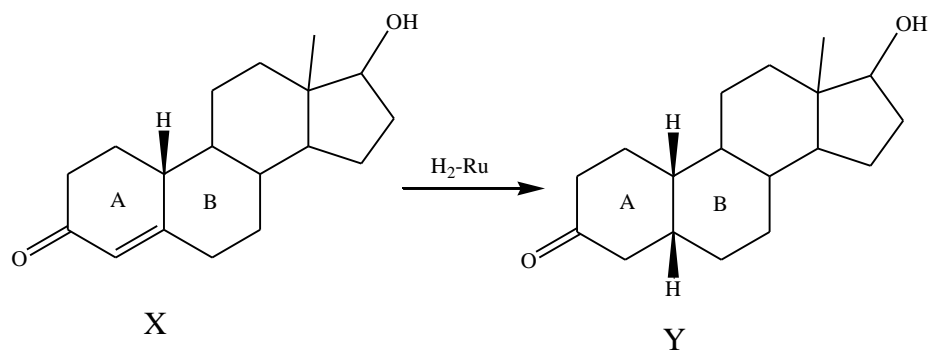
1. positive cotton effect
2. negative cotton effect
3. zero cotton effect
4. infinity



Q8.

Y has an ORD resembling that of an A/B trans 3-oxosteroid with

1. positive cotton effect
2. negative cotton effect
3. zero cotton effect
4. infinity cotton effect



Q9.

Y has an ORD resembling that of an A/B trans 3-oxosteroid with

1. positive cotton effect
2. negative cotton effect
3. zero cotton effect
4. infinity cotton effect

Q10. (-)-menthone which exists as two conformers in water gives

1. positive cotton effect
2. negative cotton effect
3. zero cotton effect
4. infinity cotton effect