



Fill in the Blank Questions on Tautomerism

1. Tautomerism involves a dynamic equilibrium between two or more structural isomers known as _____.
2. The most common type of tautomerism is - tautomerism.
3. In keto-enol tautomerism, a _____ group (C=O) is in equilibrium with an _____ group (C=C-OH).
4. The movement of a _____ atom and a _____ bond characterizes tautomerism.
5. Tautomerism often involves the shift of a hydrogen atom and a _____ bond.
6. The tautomerism between acetone and prop-2-en-1-ol is an example of - tautomerism.
7. In tautomerism, the chemical structures that are in equilibrium are called _____.
8. The equilibrium between tautomers can be influenced by factors such as _____, _____, and _____.
9. The phenomenon where an aldehyde group is in equilibrium with an alcohol group is called - tautomerism.
10. The tautomeric form of acetaldehyde (CH_3CHO) in equilibrium is _____ ($\text{CH}_2=\text{CH-OH}$).
11. In the enol form of acetoacetic acid, the hydroxyl group is directly bonded to a _____ carbon atom.
12. The presence of a _____ carbon is necessary for keto-enol tautomerism.
13. Lactam-lactim tautomerism involves a shift between an amide (lactam) and an _____ (lactim) form.
14. Tautomerism is a type of _____ isomerism where the isomers are in a rapid interconversion.
15. The enol form of a ketone is typically _____ stable than the keto form.

Answer Key

1. Tautomers
2. Keto-enol
3. Keto, enol
4. Hydrogen, double
5. Double
6. Keto-enol
7. Tautomers
8. Solvent, temperature, pH
9. Aldehyde-alcohol
10. Vinyl alcohol
11. Double-bonded
12. Alpha
13. Imidic acid
14. Structural
15. Less