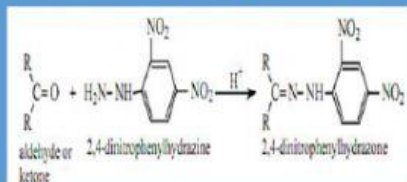


Chemical tests involving carbonyl compounds

Brady's Test: Confirmation test for Carbonyl compounds

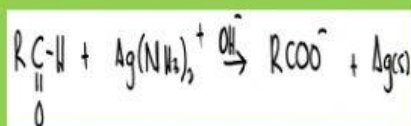
Yellow orange precipitate is formed



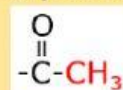
Tollen's Test:

To differentiate aldehyde from ketone

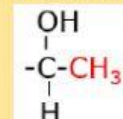
Formation of silver mirror (Ag)



Iodoform test:
Confirmation test for structure methyl carbonyl



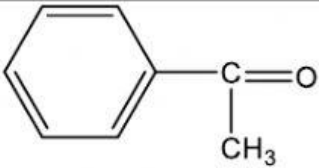
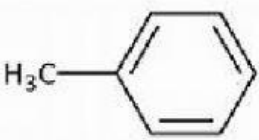
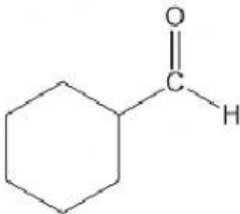
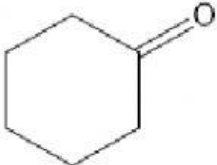
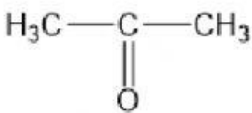
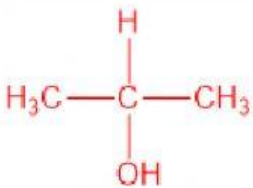
methyl carbinol



Yellow precipitate is formed

Instruction: Propose test(s) to differentiate the two given compounds by writing **Yes** in the column

No	Organic compounds		Brady's test	Tollen's test	Iodoform Test
1	$\text{CH}_3\text{CH}_2\text{CH}_2\text{C}-\text{H}$ $\parallel$ O Butanal	vs	$\text{CH}_3\text{CH}_2\text{CCH}_2\text{CH}_3$ $\parallel$ O 3-pentanone		
2	$\text{CH}_3\text{CH}_2\text{CH}_2\text{C}-\text{H}$ $\parallel$ O Butanal	vs	 cyclohexanone		
3	$\text{CH}_3\text{CH}_2\text{CCH}_2\text{CH}_3$ $\parallel$ O 3-pentanone	vs	 2-pentanone		
4	 2-pentanone	vs	$\text{CH}_3\text{CH}_2\text{CH}_2\text{C}-\text{H}$ $\parallel$ O Butanal		
5	 4-phenyl-2-butanone (ketone)	vs	 1-cyclobutyl-1-propanone (ketone)		
6	 1-cyclobutyl-1-propanone (ketone)	vs	 2-pentanone		
7	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{C}-\text{C}=\text{O} \end{array}$ Ethanal	vs	CH_3CH_3 Ethane		

NO	Organic Compounds		Brady's test	Tollen's test	Iodoform test
8	 acetophenone	 Toluene			
9	 Cyclohexanecarbaldehyde	 Cyclohexanone			
10	 Propanone	 2-propanol			