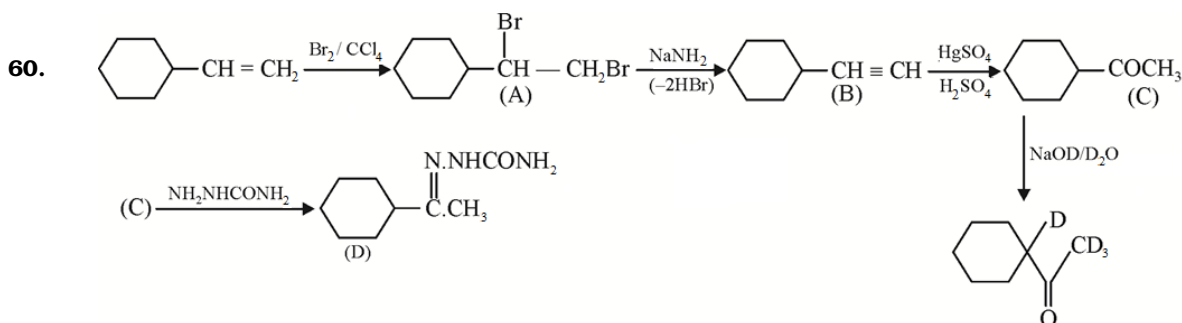
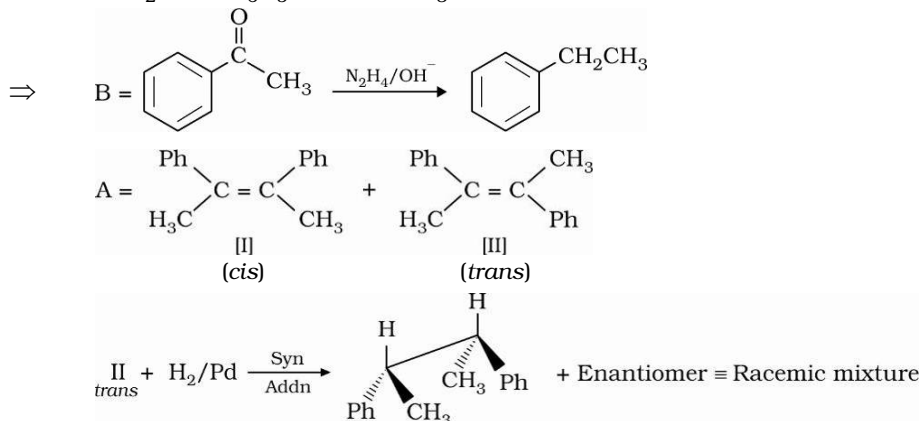
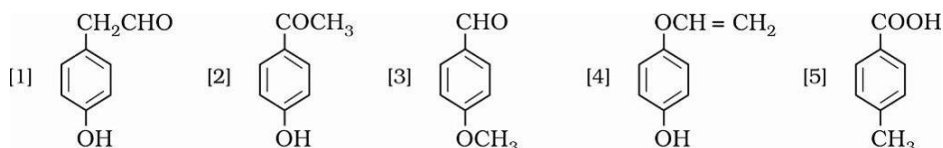


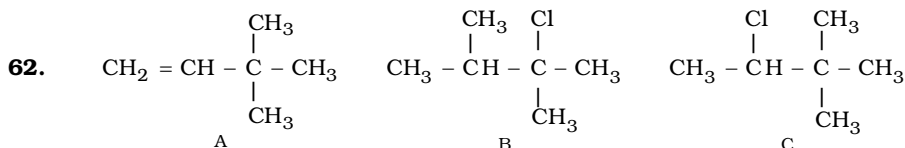
59. $B + \text{NaOH} / \text{I}_2 \longrightarrow \text{C}_6\text{H}_5\text{COONa} + \text{CHI}_3$ (B is methyl Ketone)

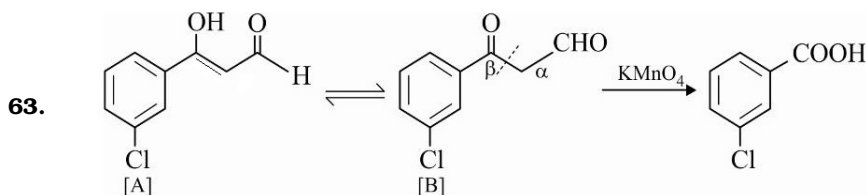
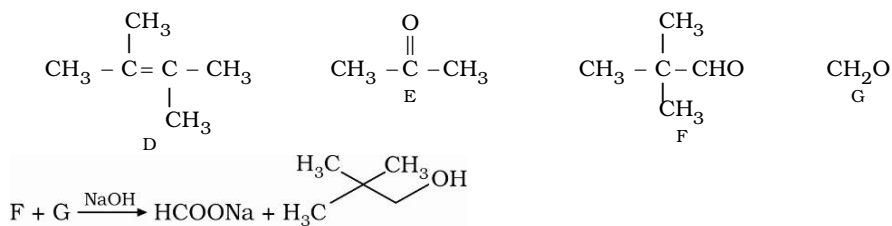


61. Various possible isomers of $\text{C}_8\text{H}_8\text{O}_2$ are as below :

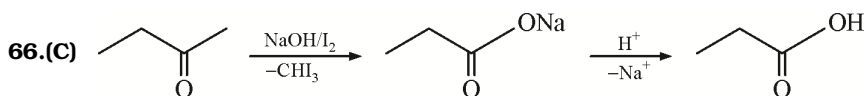
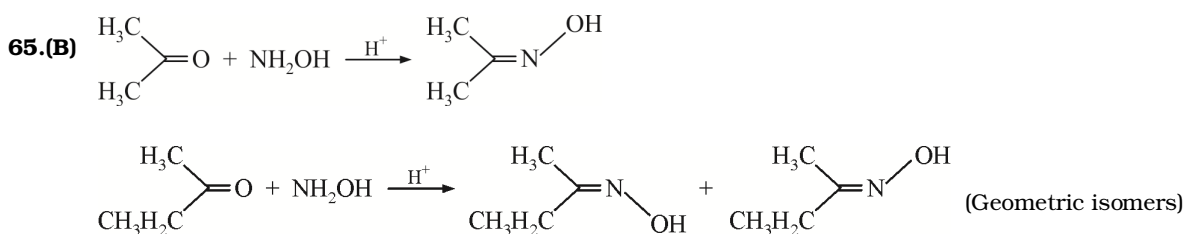
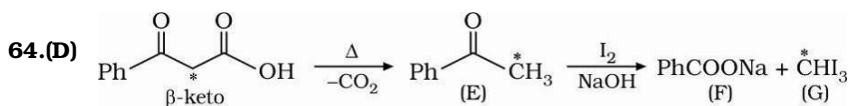


- (i) As both the compounds A and B form a silver mirror with Tollen's reagent, they have aldehydic group in their structure. In these compounds, B gives positive test with FeCl_3 solution. So it must also have phenolic group in its structure. Hence, compound A is p-methoxybenzaldehyde and B is p-hydroxyphenylacetaldehyde.
- (ii) Compound C gives positive iodoform test, so it must have $\text{CH}_3\text{CO}-$ group in its structure. Hence compound C is p-hydroxyphenylmethyl ketone.
- (iii) Compound D is readily extracted in aqueous NaHCO_3 , so it must have $-\text{COOH}$ group in its structure. So, compound D is p-methylbenzoic acid.
- (iv) Compound E on hydrolysis gives 1, 4-dihydroxybenzene hence it is p-hydroxyphenylmethyl ether. Hence the structures of all the five compounds are : A = 3, B = 1, C = 2, D = 5, E = 4

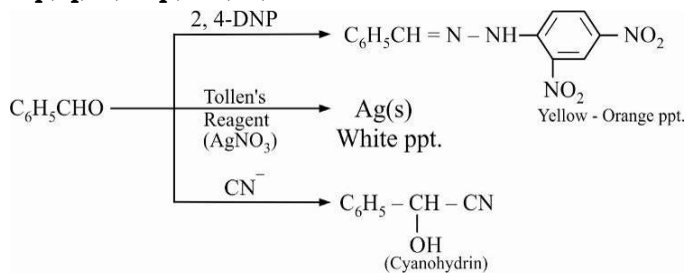




- Enol form of β -Diketones is highly stable.
- Phenyl ketones on oxidation give benzoic acid.

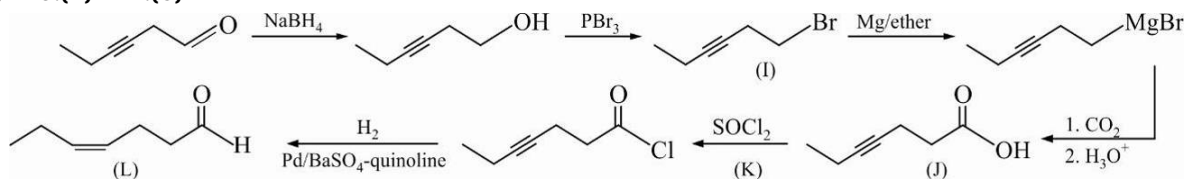


68. **A-p, q, s ; B-q ; C-r, s ; D-r**

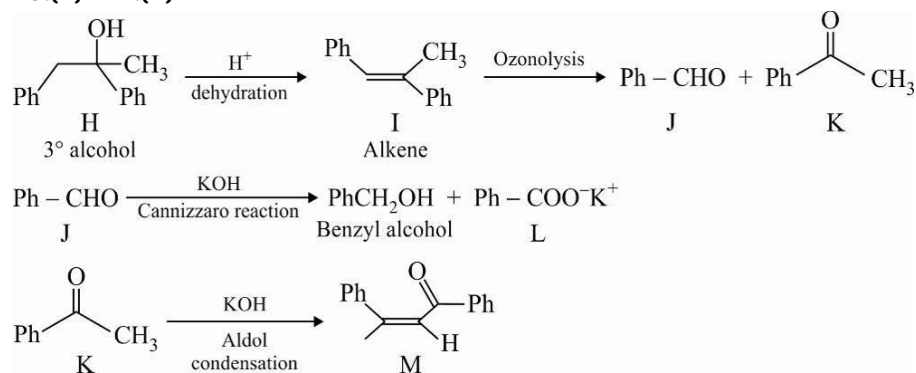


- $\text{CH}_3\text{C} \equiv \text{CH} \xrightarrow{\text{AgNO}_3} \text{CH}_3\text{C} \equiv \text{C} - \text{Ag}$ (White ppt.)
- CN^- is nucleophile, used for cyanohydrin formation.
- I^- is nucleophile and form yellow precipitate with AgNO_3 not white.

69.(D) 70.(A) 71.(C)



72.(B) 73.(A) 74.(D)



74.(D) J → PhCHO; K → PhCOCH₃; L → PhCOOK