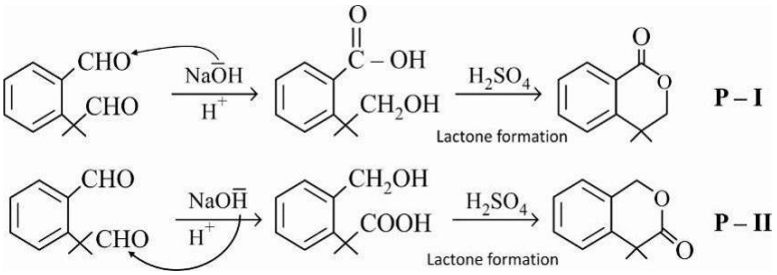
Daily Tutorial Sheet-9	Level-2

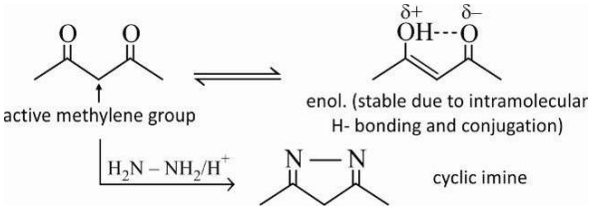
106.(B) There are two possible products:



Note : In product (1), – CHO is attached to phenyl group which decreases its reactivity (via + M effect) and eventually its intermediate is not a good hydride donor.

While in product (II), – CHO is attached to alkyl group side which is more electrophilic against –HO (as Nucleophile) and its intermediate is better H^- (hydride donor) forming acid.

107.(ABD)

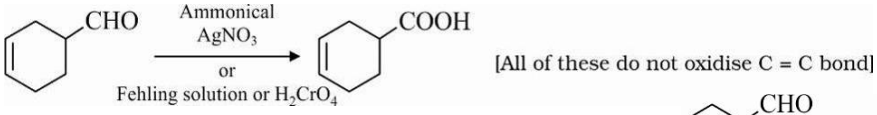


* It does not give Tollen's or Fehling solution test.

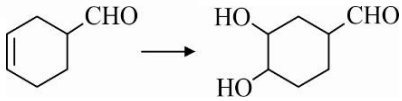
108.(ABC) A, B, C are correct and D is incorrect. Acetone is more reactive than acetophenone with $NaHSO_3$.

109.(BCD) Here acid-base reaction with NaOH also includes Aldol condensation, because in the first step NaOH abstracts α – Hydrogen, Option -A does not have acidic 'H', so undergo Cannizzaro's reaction.

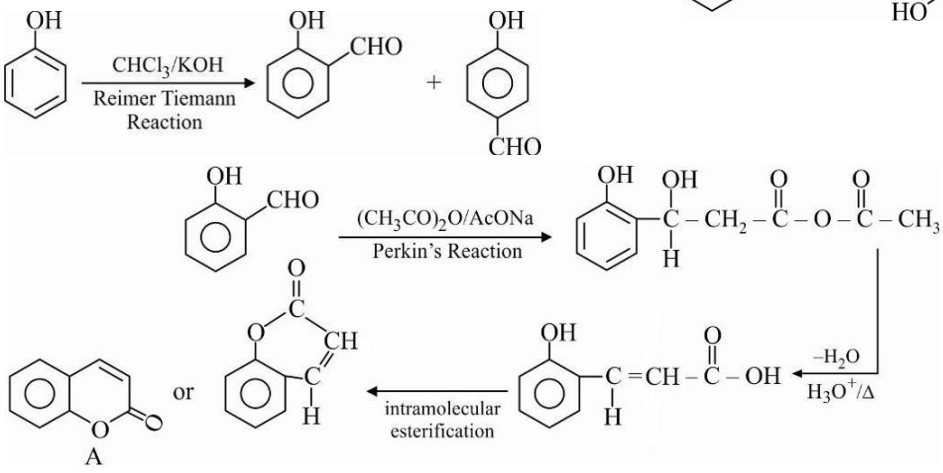
110.(BCD)

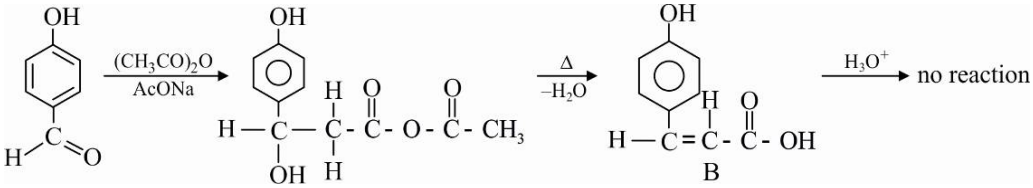


With 1% alkaline $KMnO_4$, double bond show hydroxylation

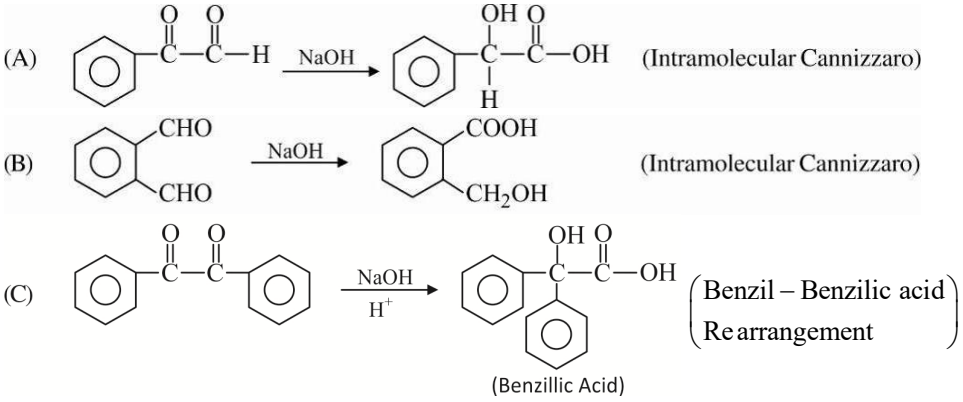


111.(AB)



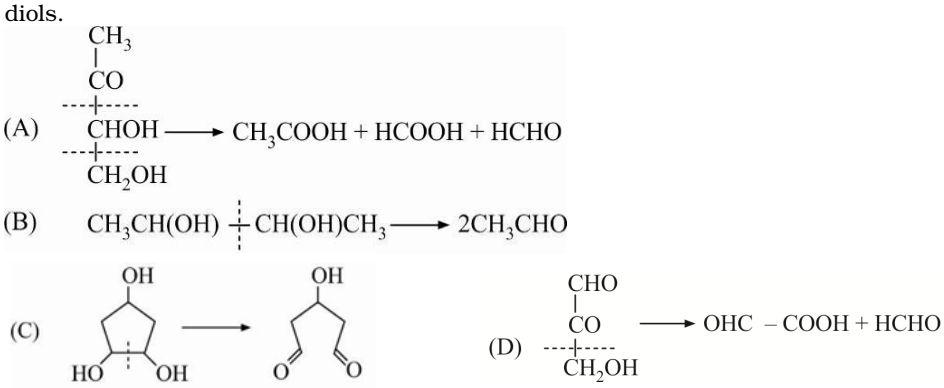


112.(ABC)

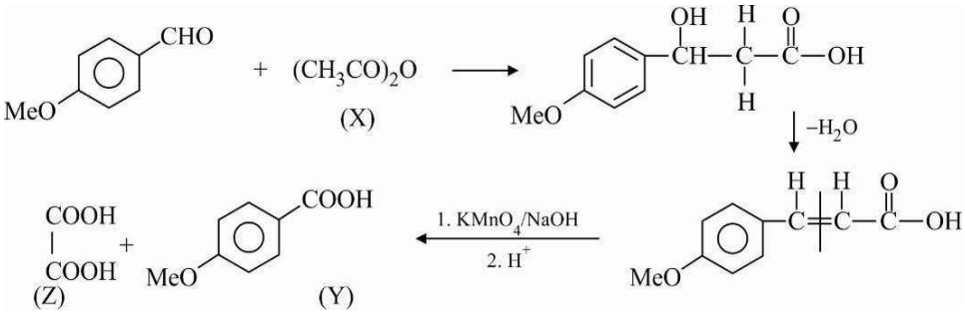


(Similar to Intramolecular Cannizzaro Reaction, where migration of phenide, (Ph^-) ion occurs instead of hydride ion)

113.(ABCD) Compounds containing adjacent –OH & CO groups are also cleaved by HIO_4, apart from viccinal diols.



114.(BCD)



115.(B)