

CHEMISTRY

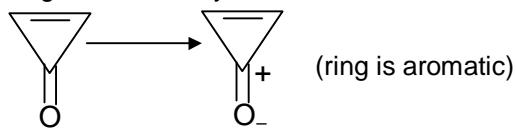
PHASE TEST – IV

ANSWERS, HINTS & SOLUTIONS

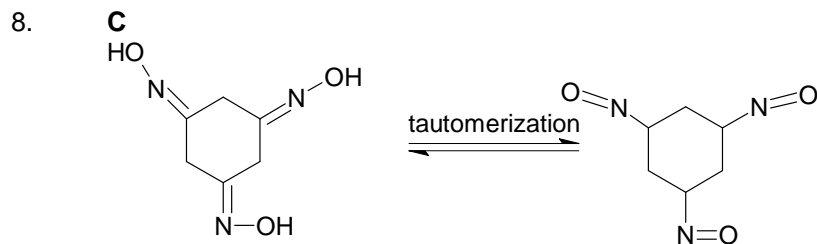
Q. No.	Answers	Q. No.	Answers	Q. No.	Answers
1.	A	11.	A	21.	C
2.	B	12.	B	22.	C
3.	B	13.	C	23.	A
4.	C	14.	B	24.	B
5.	D	15.	B	25.	B
6.	C	16.	C	26.	D
7.	A	17.	A	27.	C
8.	C	18.	D	28.	A
9.	D	19.	D	29.	C
10.	D	20.	B	30.	A

ANSWER, HINT AND SOLUTION

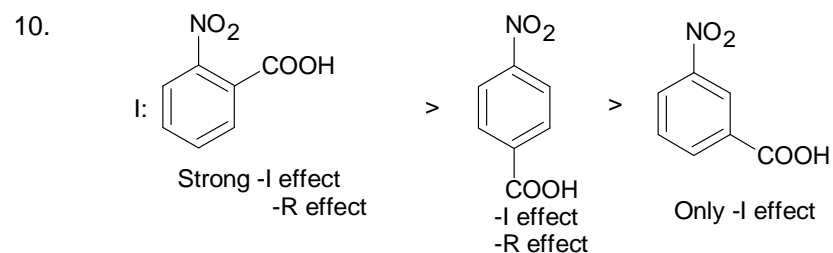
5. To gain aromaticity the molecule exists into charge separated form



6. Here ring contraction takes place during Pinacol Pinacolone rearrangement.



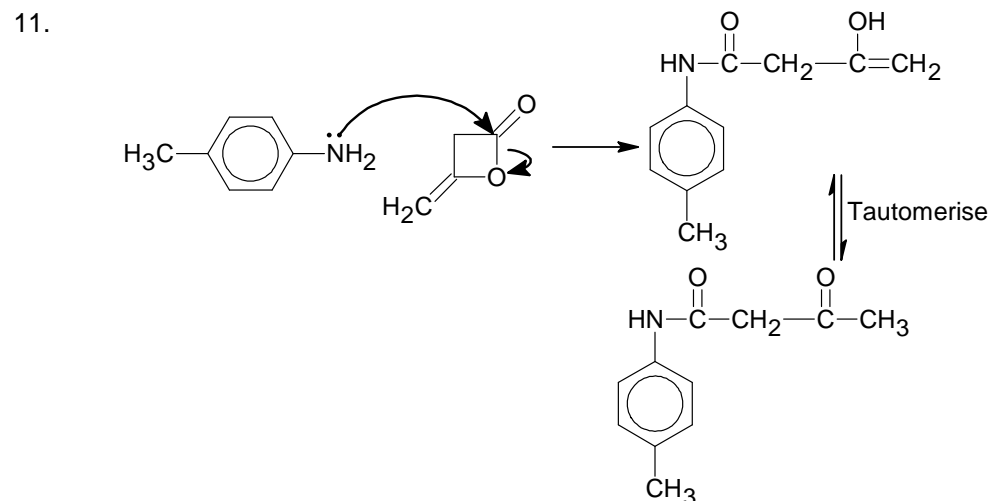
9. There is one chiral centre as well as molecule can show geometrical isomerism.



II: Higher the acidity of an acid lower the basicity of its conjugate base.

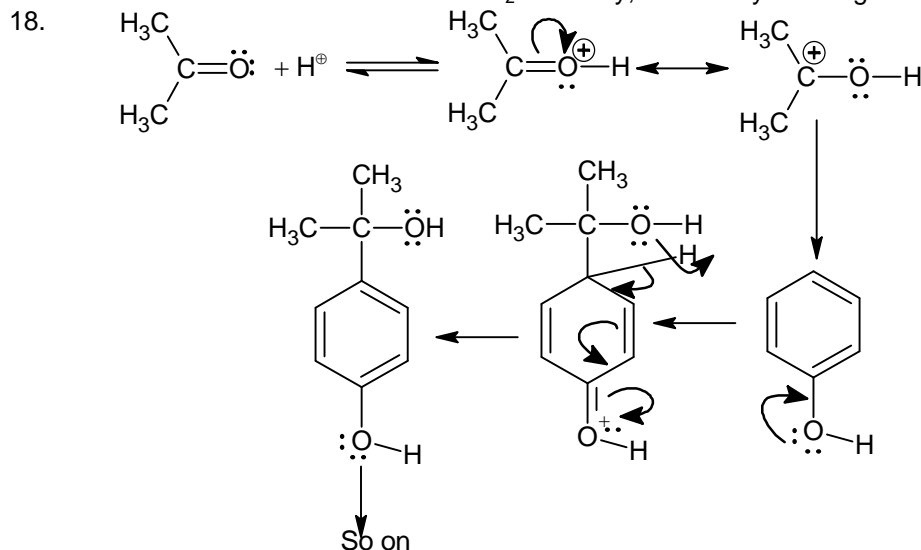
III: Higher the stability of an alkene lower the heat of hydrogenation.

IV: $\text{Ph}-\overset{\text{O}}{\parallel}{\text{C}}-\text{CH}_2-\text{COOH}$ is the β -keto acid so it would be having maximum ease for decarboxylation.



12. PCC (Pyridinium chlorochromate) converts only 1° alcohol to aldehyde.

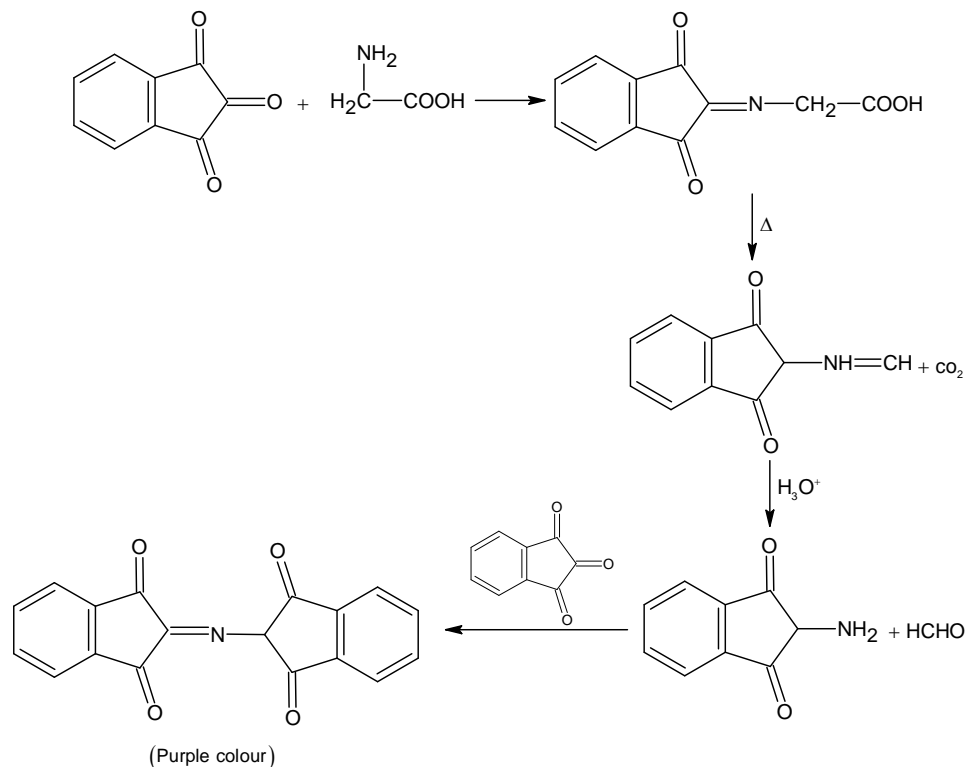
16. Aldehyde is first converted into cyclic thioacetal and then st. base like Ph – Li is used to generate carbanion and then treated with D₂O. Finally, the aldehyde is regenerated.



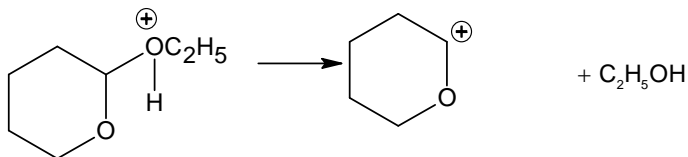
19. As nitrogen is less electronegative than oxygen.

22. The methoxy group being electron-releasing group makes the release of hydride group more easy.

23.

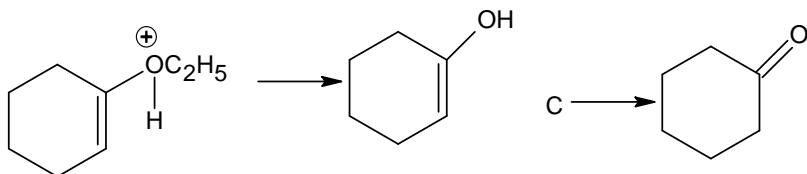


24.



(II) is an acetal

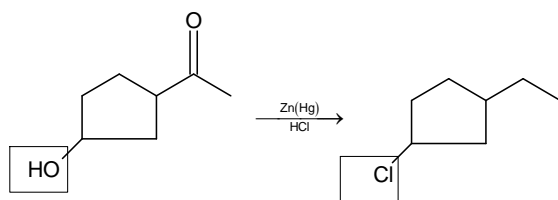
(Resonance stabilisation)



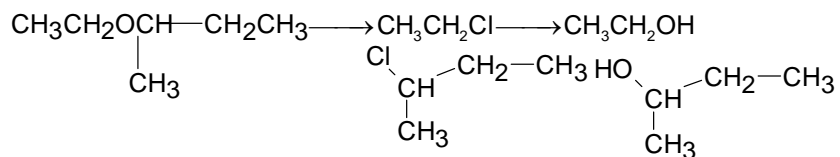
(III)

(Keto enol stabilization)

25.



28.



29. In II tautomerism is not possible.

30. The group anti to the leaving group will migrate.