

SUBJECT - CHEMISTRY

CLASS - B.Sc (Sub/Gen) PART - II

GROUP - C

TOPIC - AROMATIC RINGS OF PHENOLS

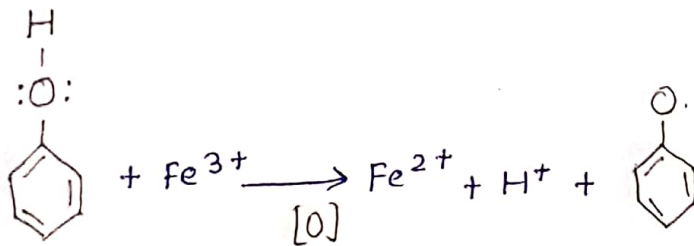
Dr Harimohan Prasad Singh

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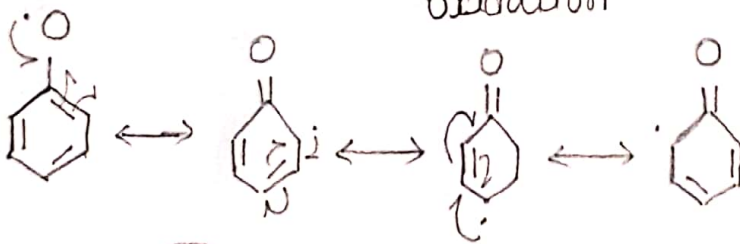
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AROMATIC RINGS OF PHENOLS

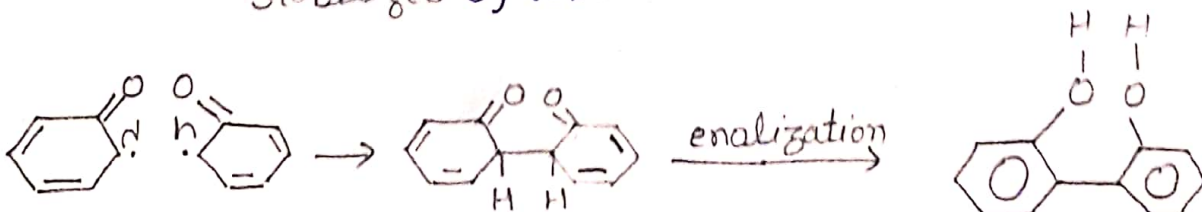
The aromatic rings of phenols are highly susceptible to oxidation by one electron oxidants, since the removal of a hydrogen atom gives a delocalized aryloxy radical (fig 1). The phenoxy radical may undergo several reactions depending on its structure. one important mode is by coupling s.e, dimerisation (fig 1) which is predominantly of the C-C type (O-O, P-P or O-P) Thus p-cresol on oxidation displays this dimerisation.



oxidation



stabilized by resonance



ortho-ortho Coupling

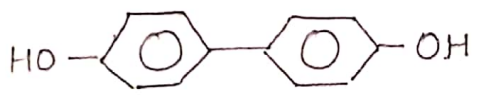
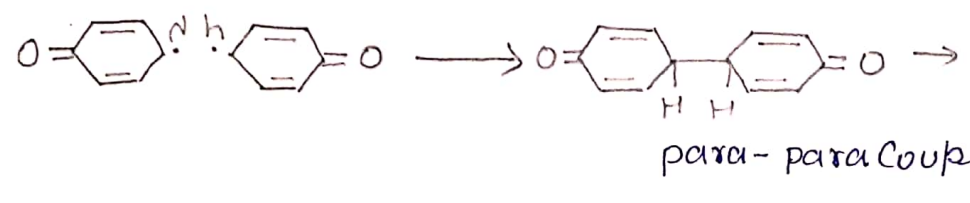
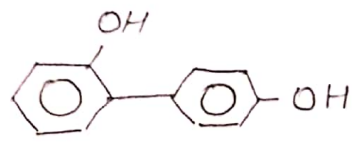
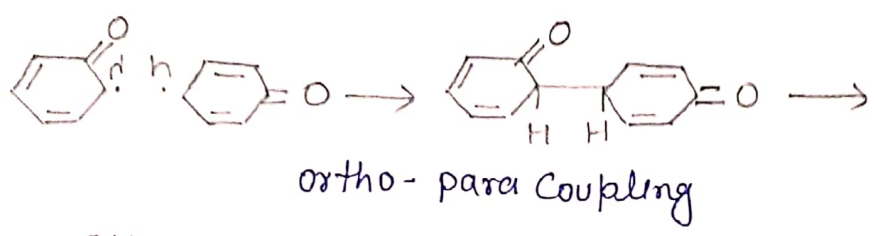


fig (1)