

D.B. College (Jaynagar) lect :- 10

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□ Chemical properties:

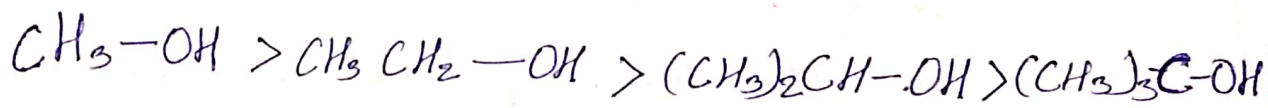
Monohydric alcohol show following reactions

(A) Reaction involving cleavage of $O-H$

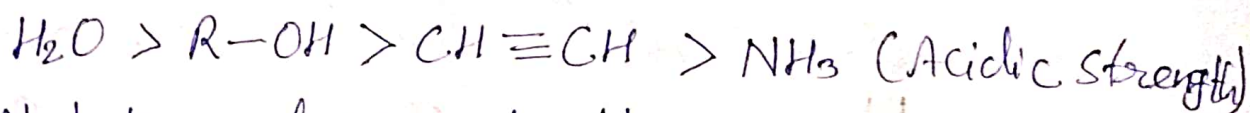
(B) Reaction involving cleavage of $C-OH$

(C) Reaction involving complete molecule of alcohol

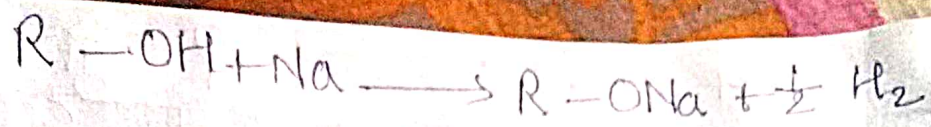
(A) Reaction involving cleavage of $O-H$: Reactivity order (Acidic nature) is



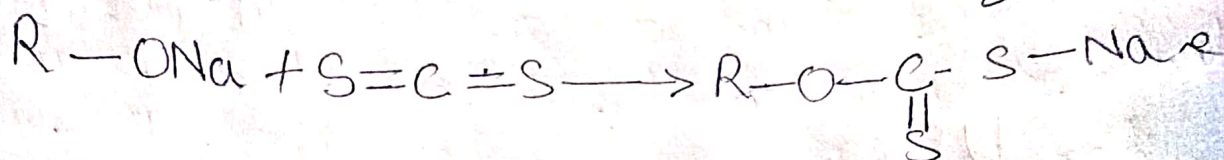
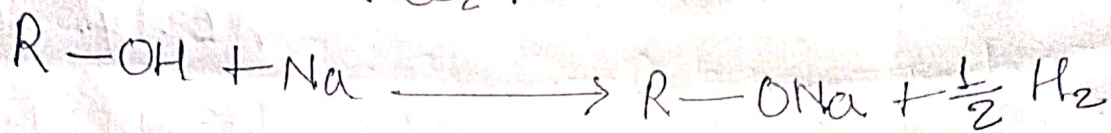
(i) Acidic nature:



Alcohols are less acidic than H_2O and neutral for litmus paper and gives H_2 with active metals (Na, K)

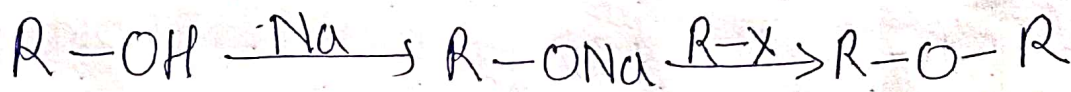
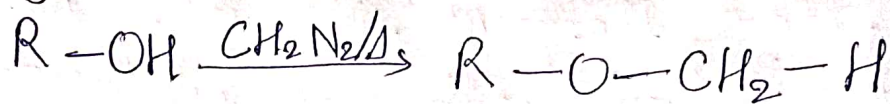


(ii) Reaction with CS_2 :



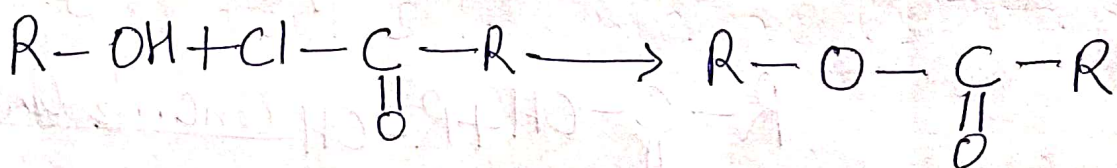
Sodium alkyl xanthate.
(used as floating agent)

(iii) Alkylation:

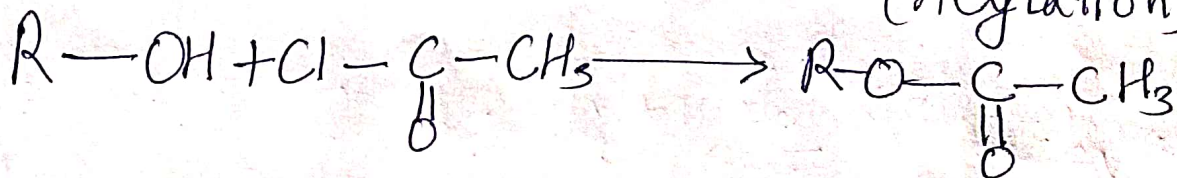


(Williamson synthesis)

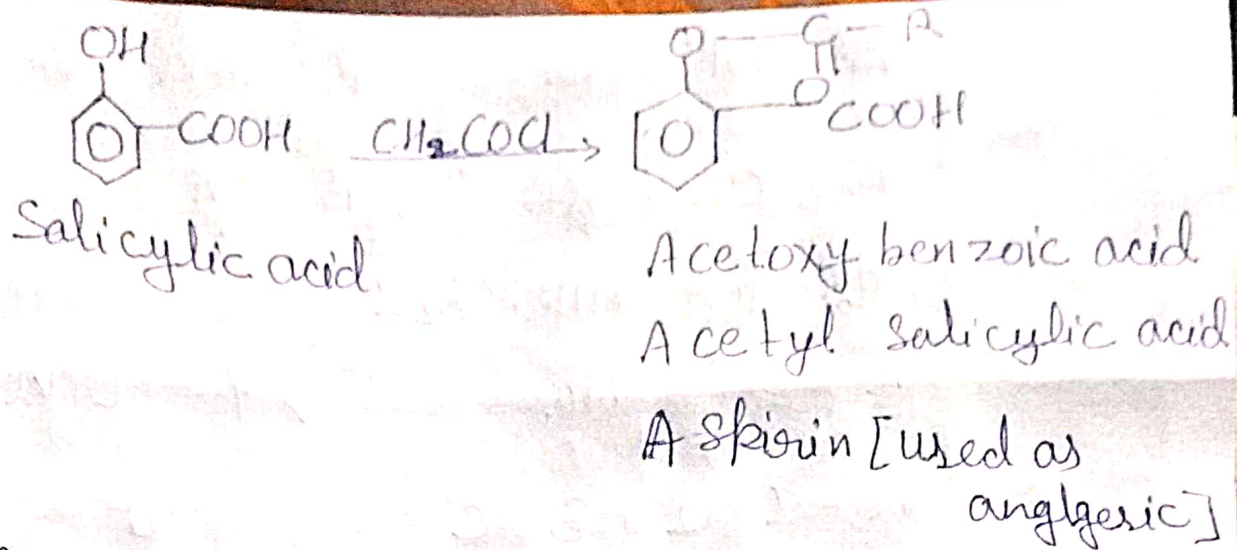
(iv) Acylation:



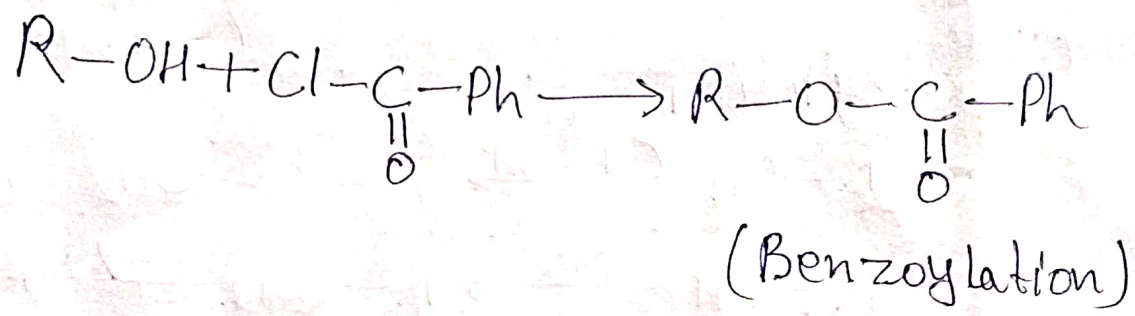
(Acylation)



(Acetylation)



(V) Benzoylation! (Schotten-Baumann's reaction)



(vi) Esterification! Conc. H₂SO₄ is used as catalyst and dehydrating agent.

