* Intro to Carbonyls + C Nucleophiles w/ Carbonyls Application Answers

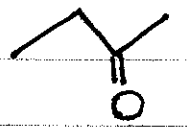
① a.) 3-pentanone

2-methylpentanal

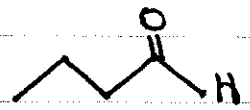
b.) 1-bromo-2-pentanone

d.) 2-iodopentanal

② a.) $HgSO_4$

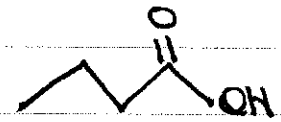


BH_3

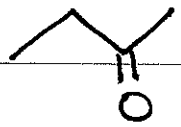


b.) PCC

Cr(VI) or $KMnO_4$

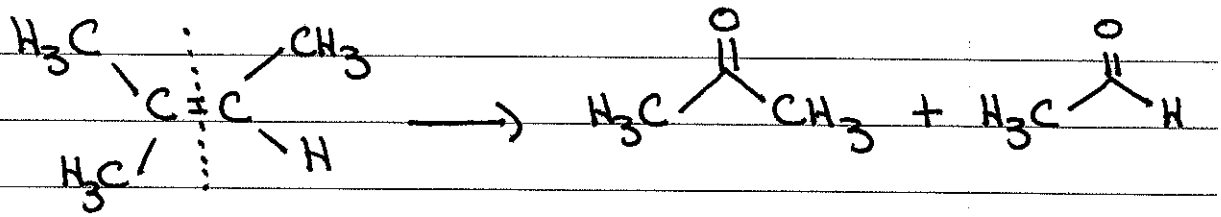


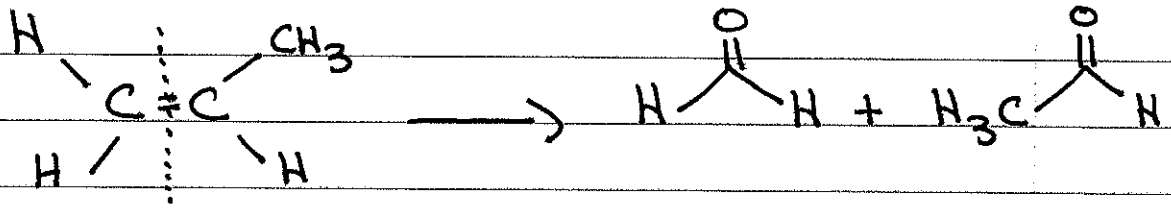
c.) PCC or Cr(VI) or KMnO4

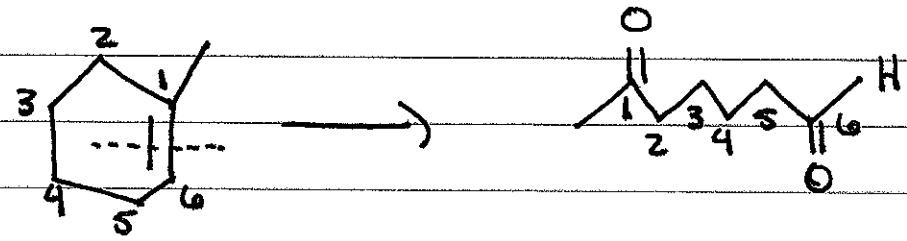


d.) No Rxn : Never oxiding a 3° ROH

e.)







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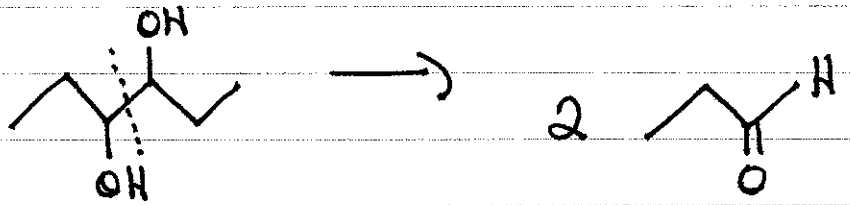

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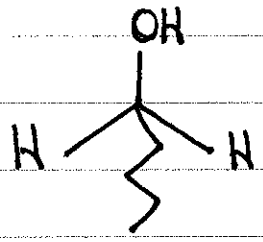
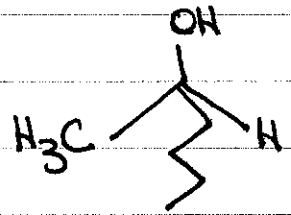
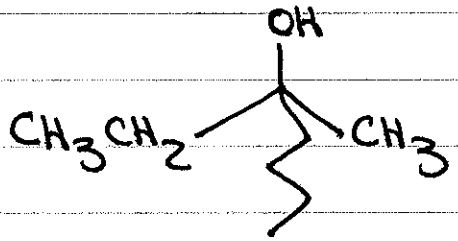


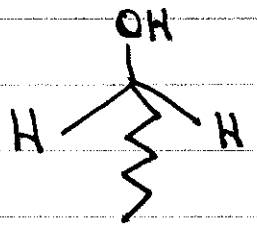
h.)



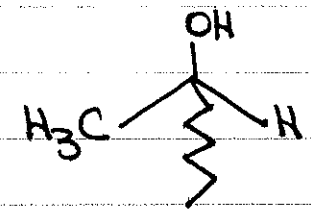
i.)



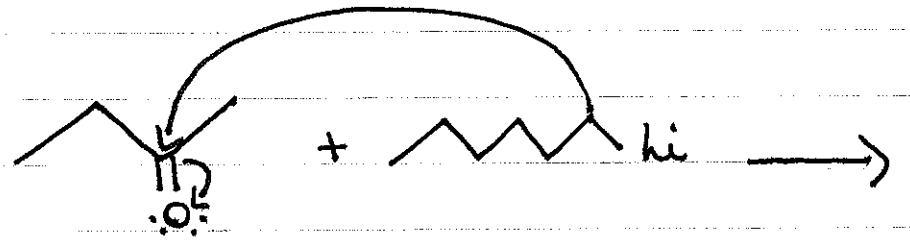
j.)

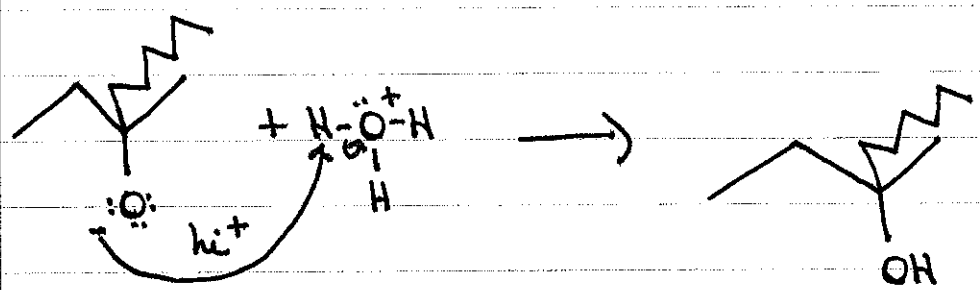


k.)

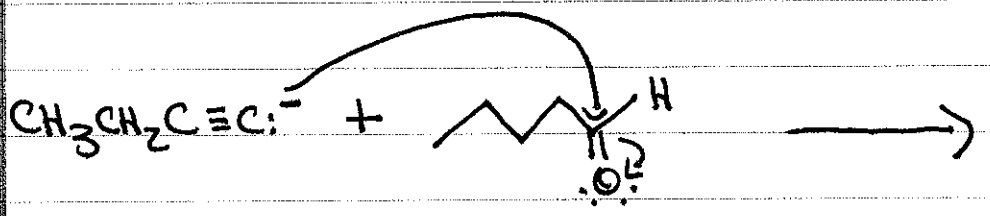


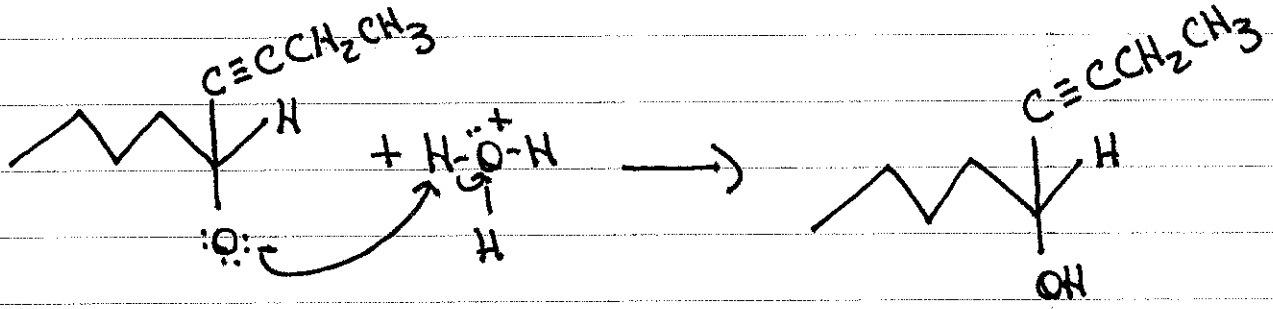
l.)





m.) $CH_3CH_2C\equiv C^- + {}^-NH_2 \longrightarrow$





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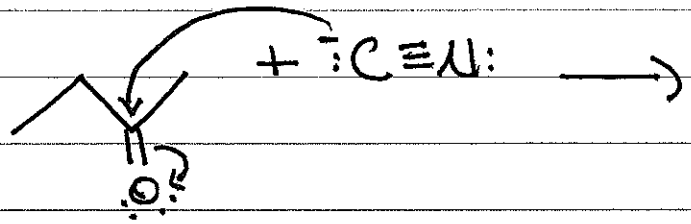
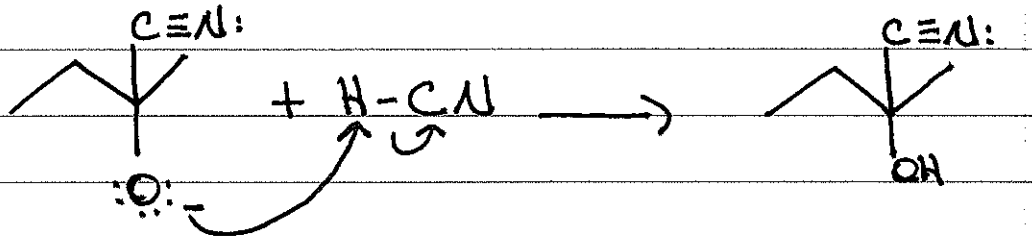
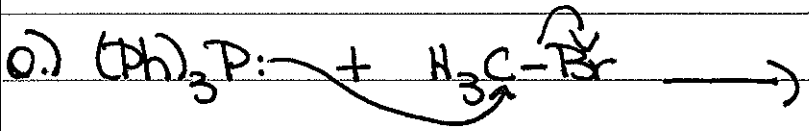
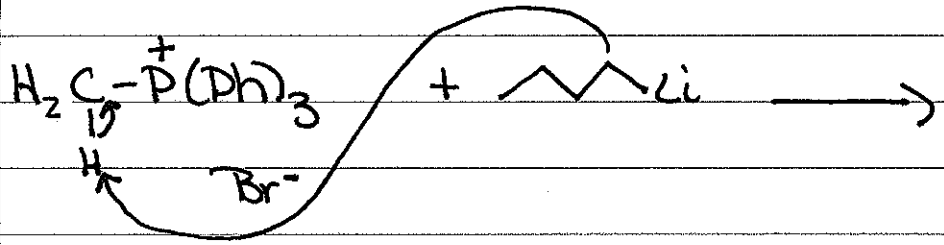




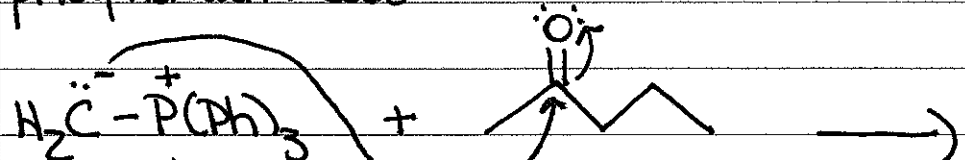
o.)

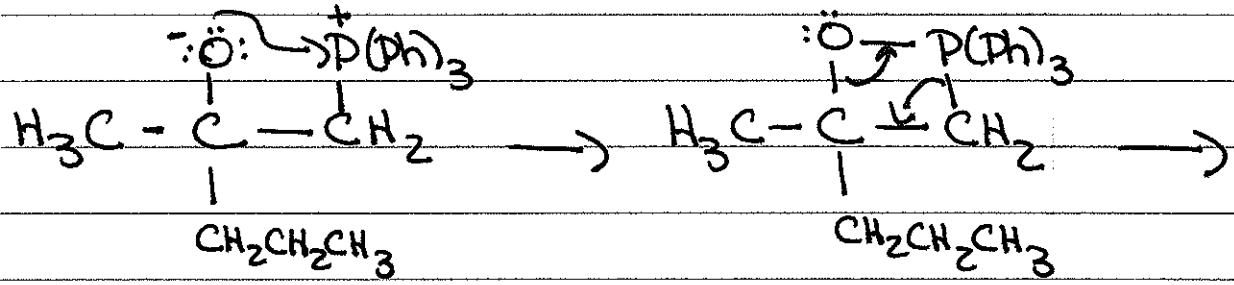




phosphonium salt

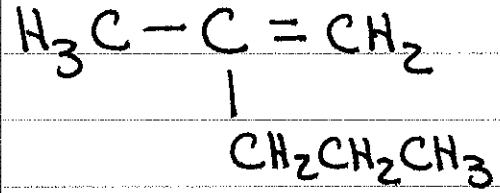
ylide





Betaine int.

oxaphosphetane int.



h.)