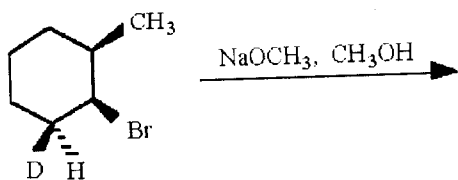
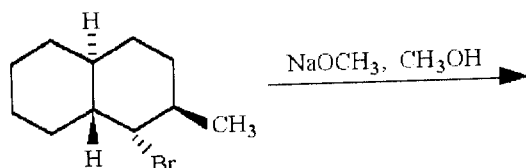


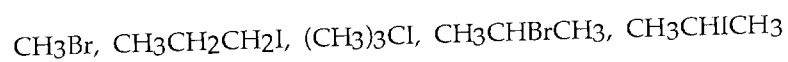
19) Provide the structure of the major organic product which results in the following reaction.



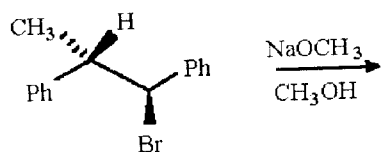
20) Provide the structure of the major organic product which results in the following reaction.



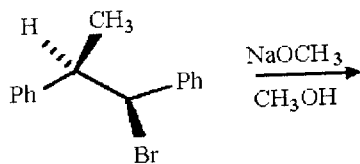
21) List the following compounds in order of increasing reactivity in an $\text{S}_{\text{N}}1$ reaction.



22) Provide the structure of the major organic product in the following reaction.



23) Provide the structure of the major organic product in the following reaction.



24) Show the best way to prepare CH3OCH(CH3)2 by an $\text{S}_{\text{N}}2$ reaction.