

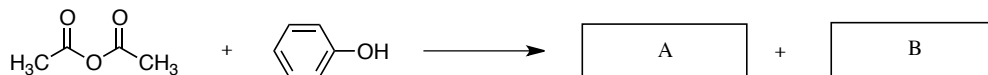


11 以下の反応について、反応機構を巻矢印で示しなさい。

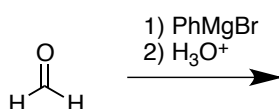


12 以下の反応における主生成物を答えなさい（立体異性体をもつ化合物は立体構造がわかるように示すこと）

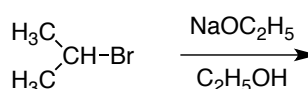
12-1



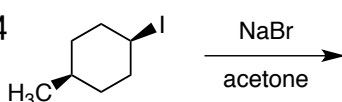
12-2



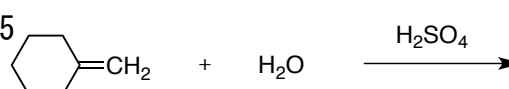
12-3



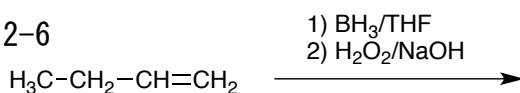
12-4



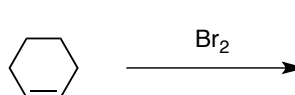
12-5



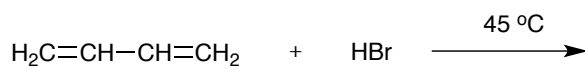
12-6



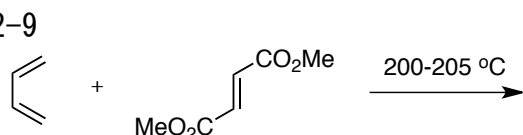
12-7



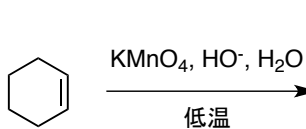
12-8



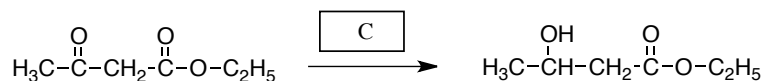
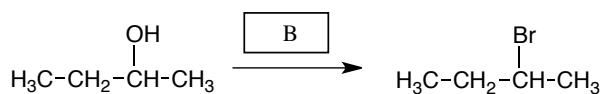
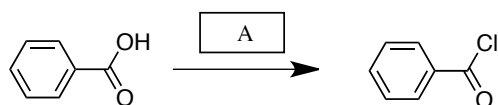
12-9



12-10



13 以下の反応において A から C に入る適切な化合物を示しなさい。



14 以下の反応における反応機構を巻矢印を用いて説明しなさい。

