

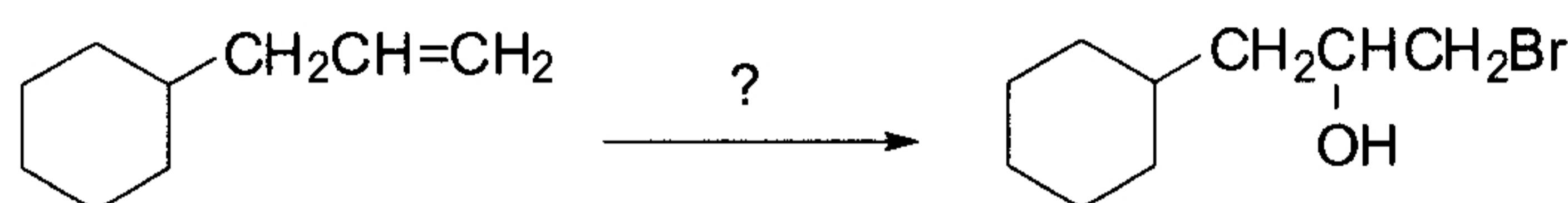
國立嘉義大學九十七學年度應用化學系碩士班招生考試(乙組)試題

卷一

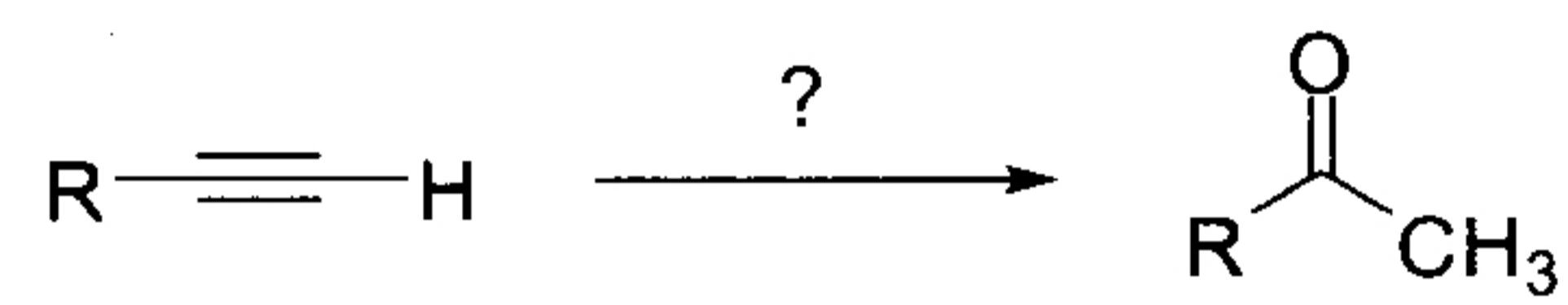
科目：基礎有機化學 :100% (I 每題 4 分；II-V 每題各 5 分)

I. Please complete the following reactions:

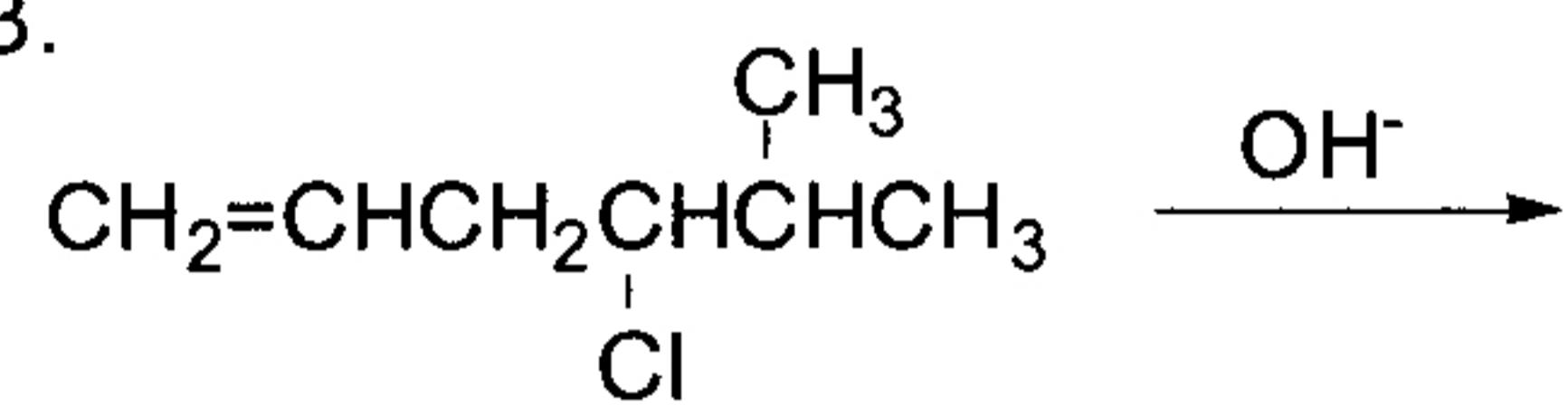
1.



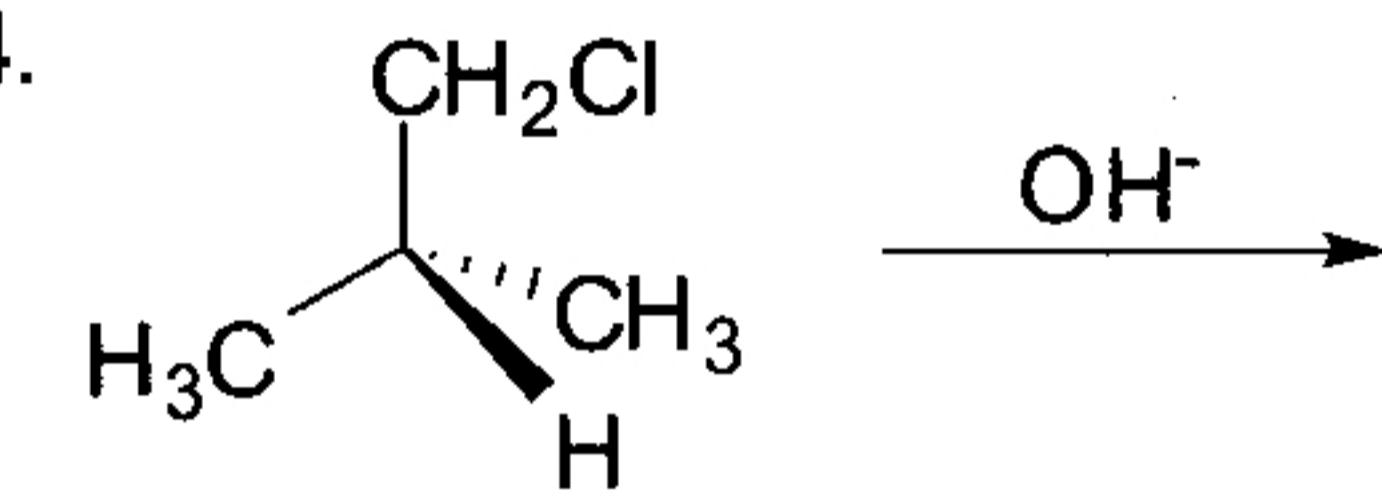
2.



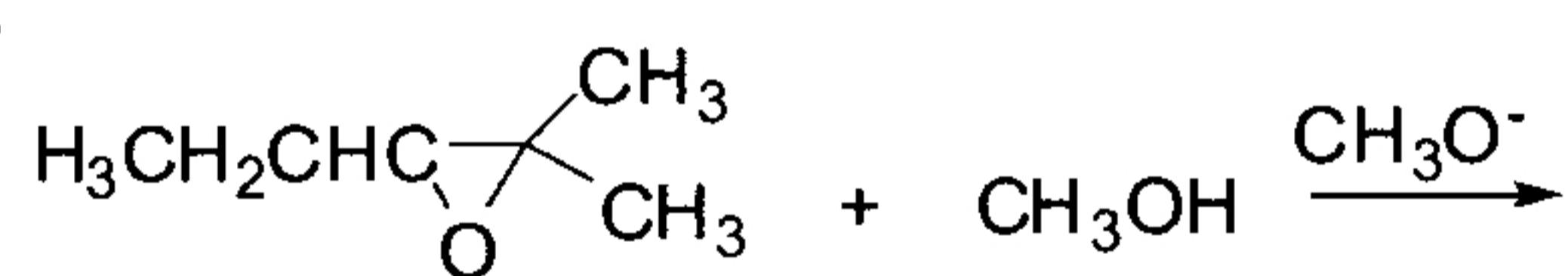
3.

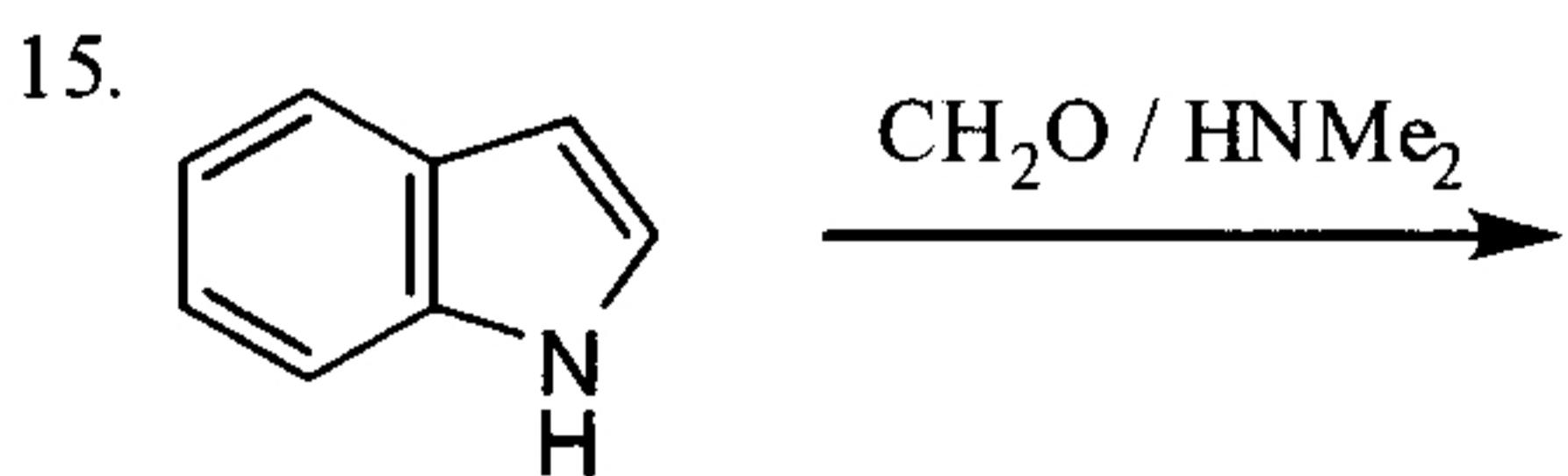
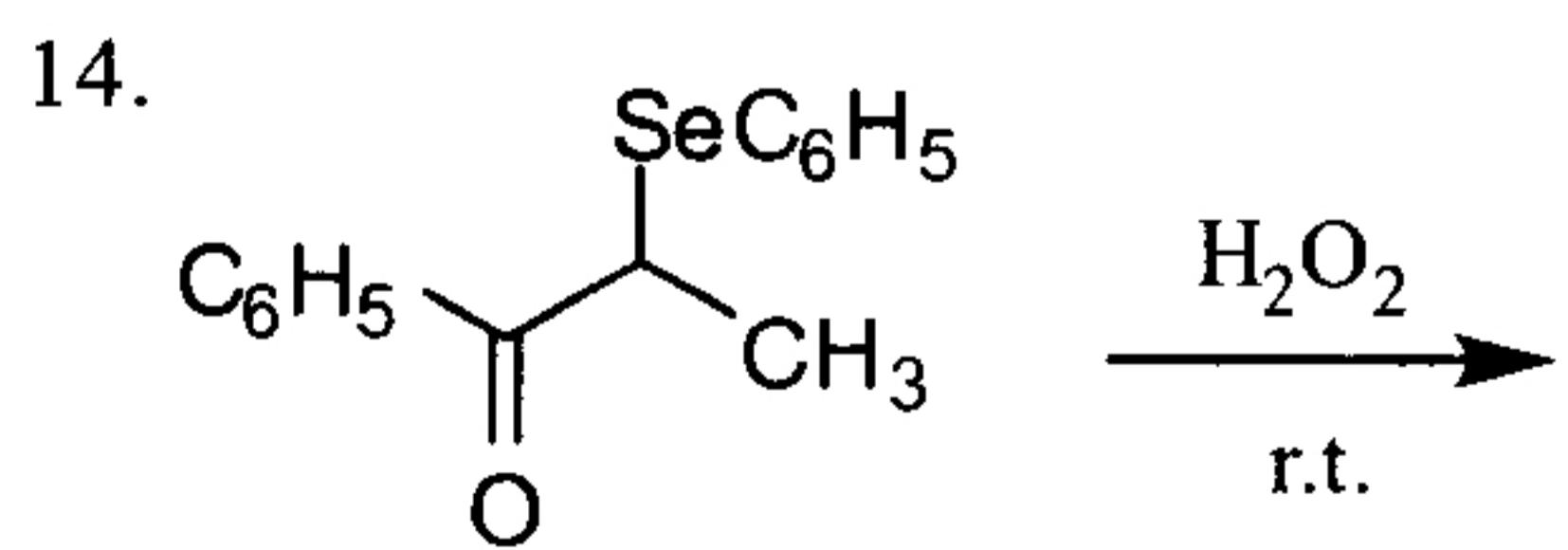
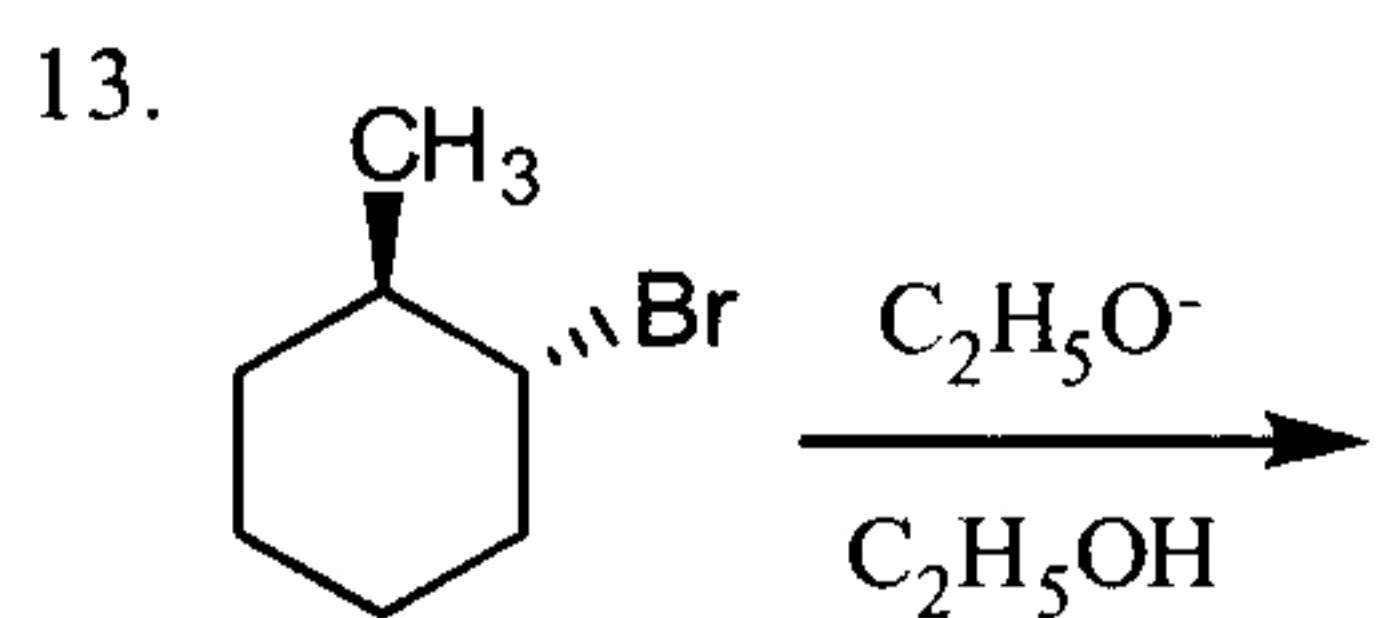
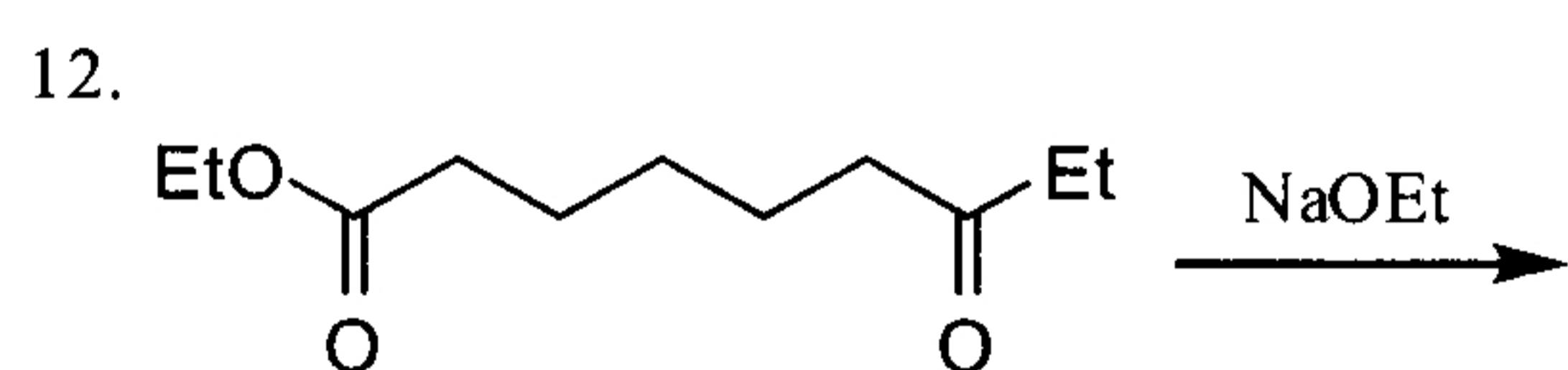
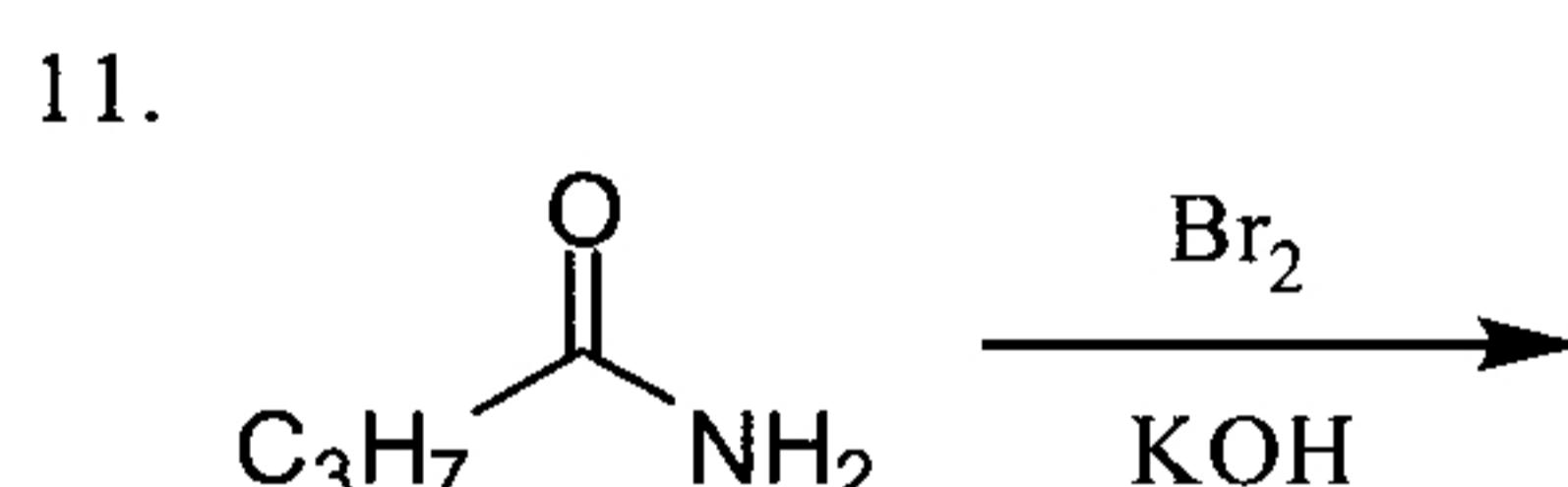
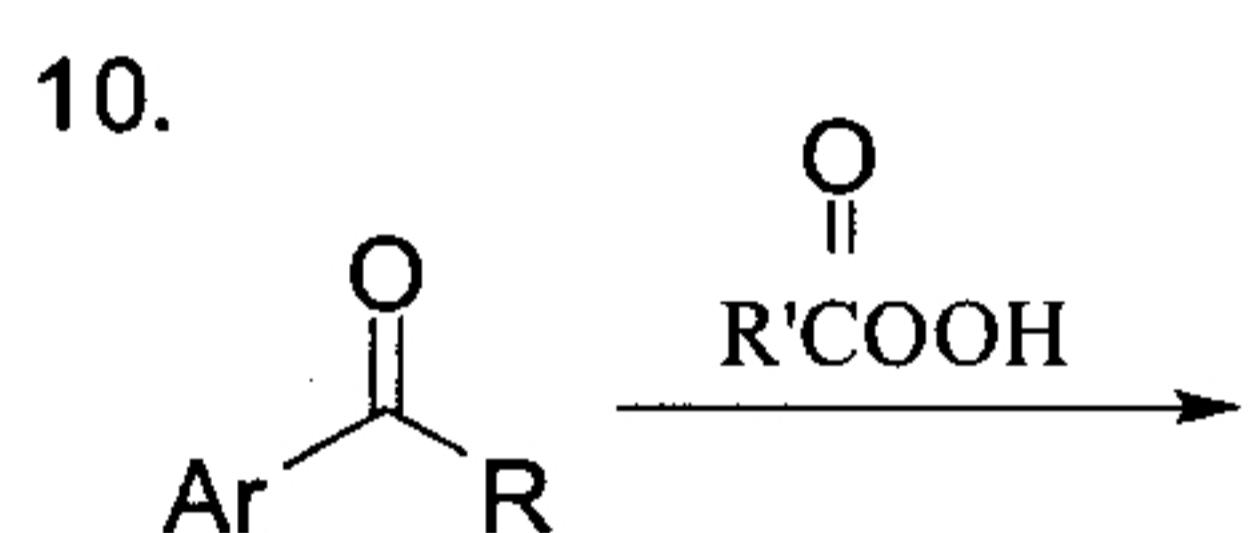
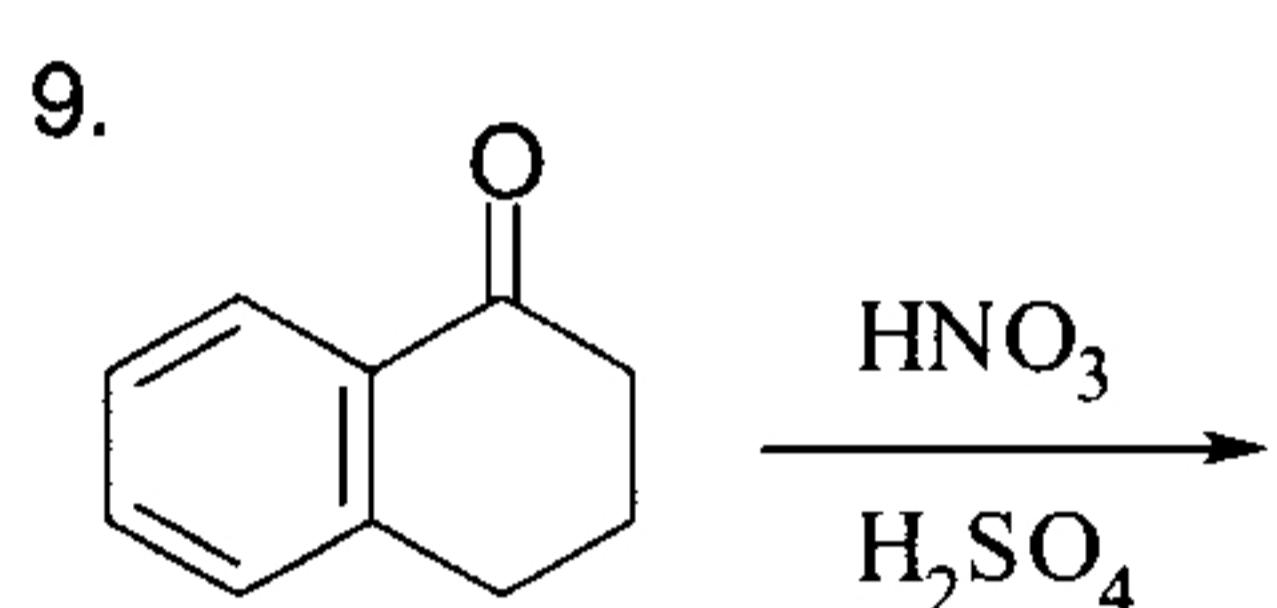
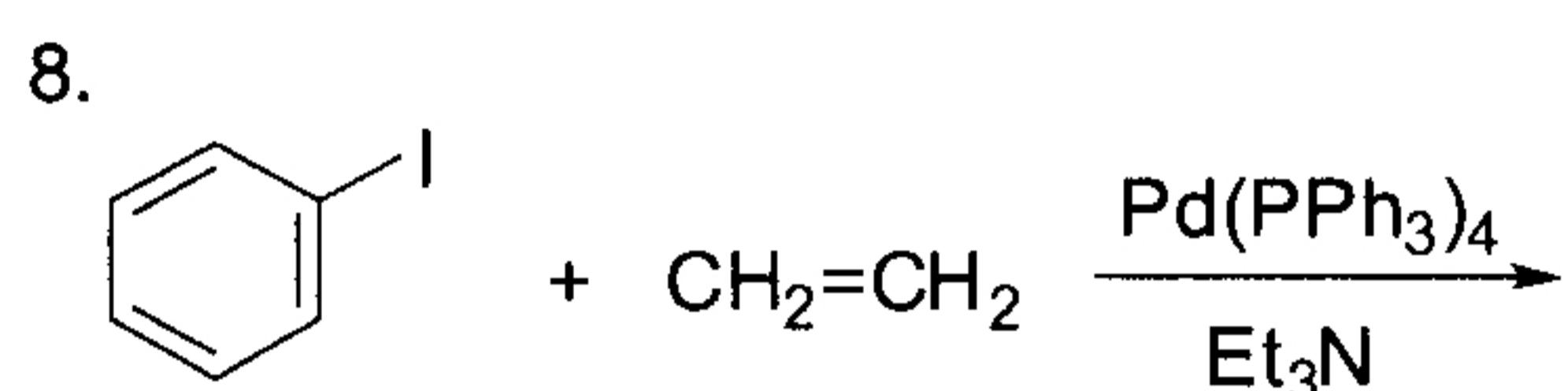
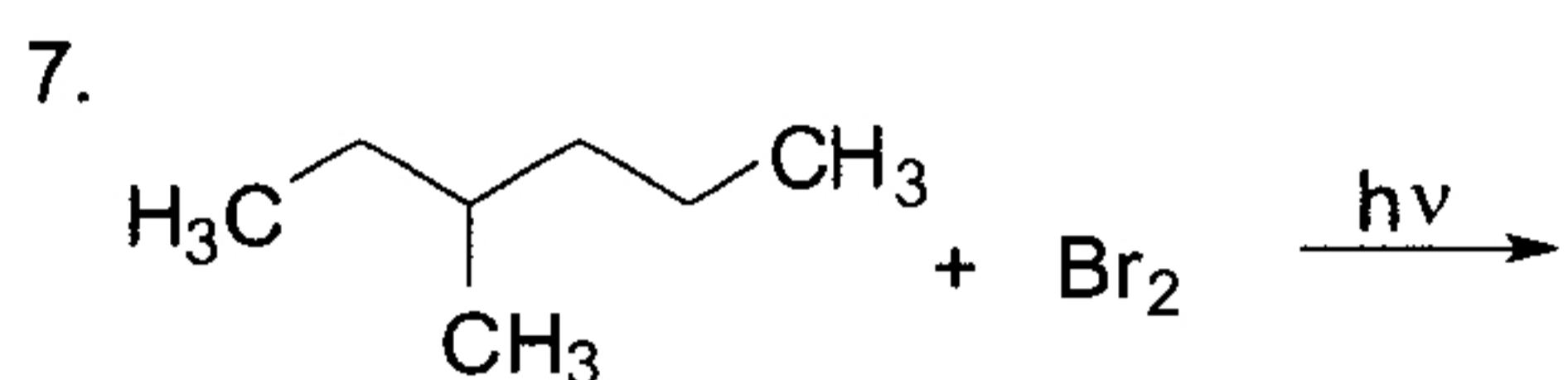
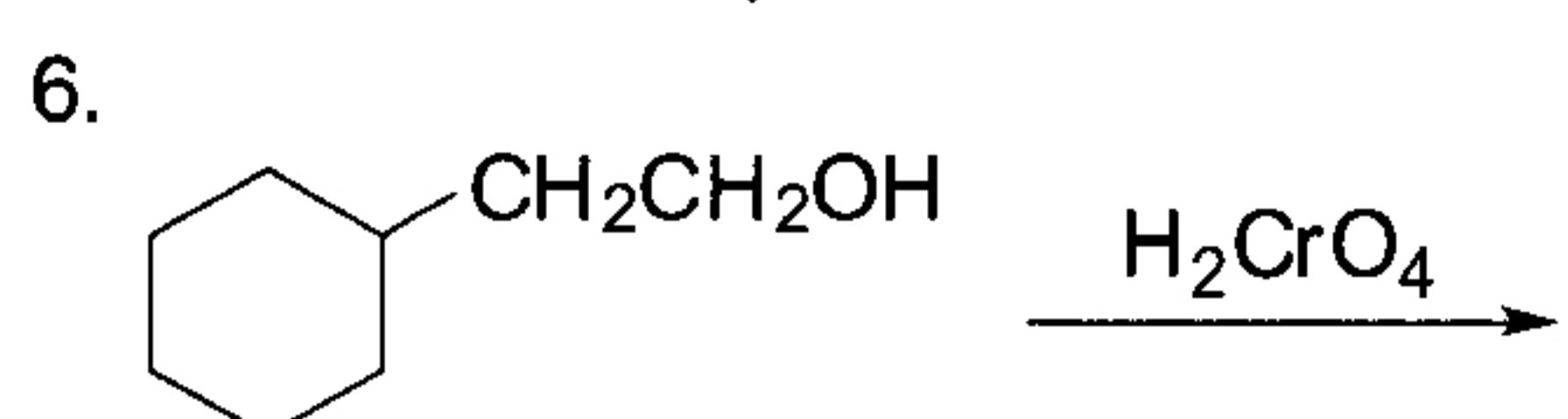


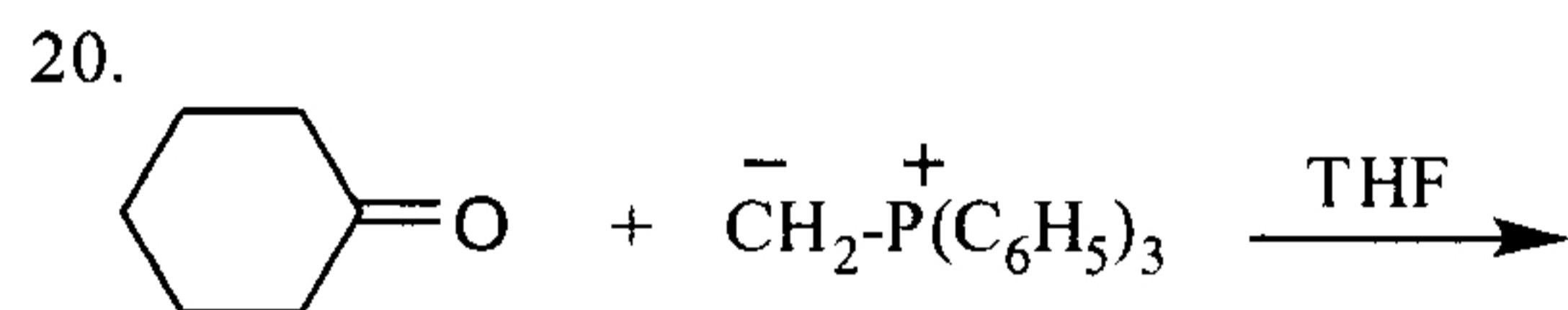
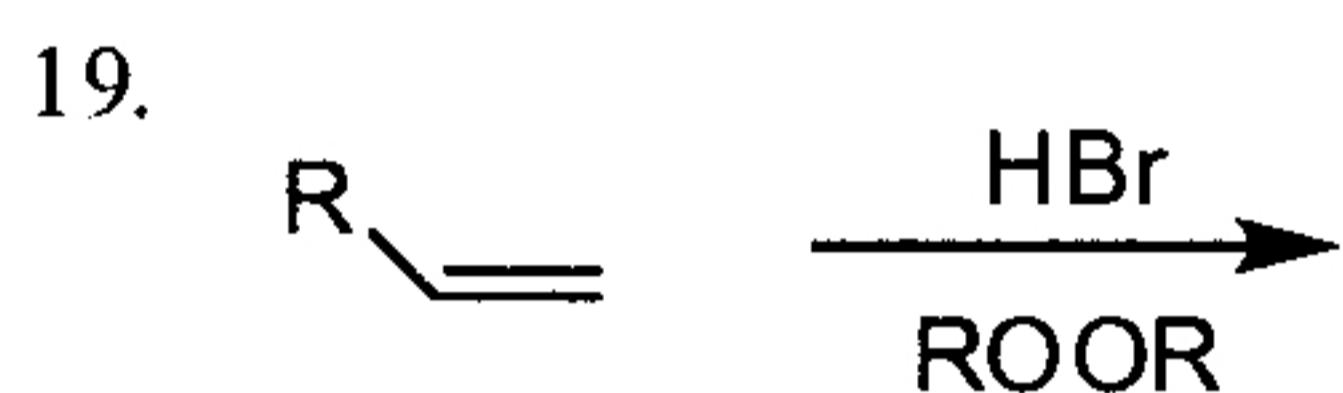
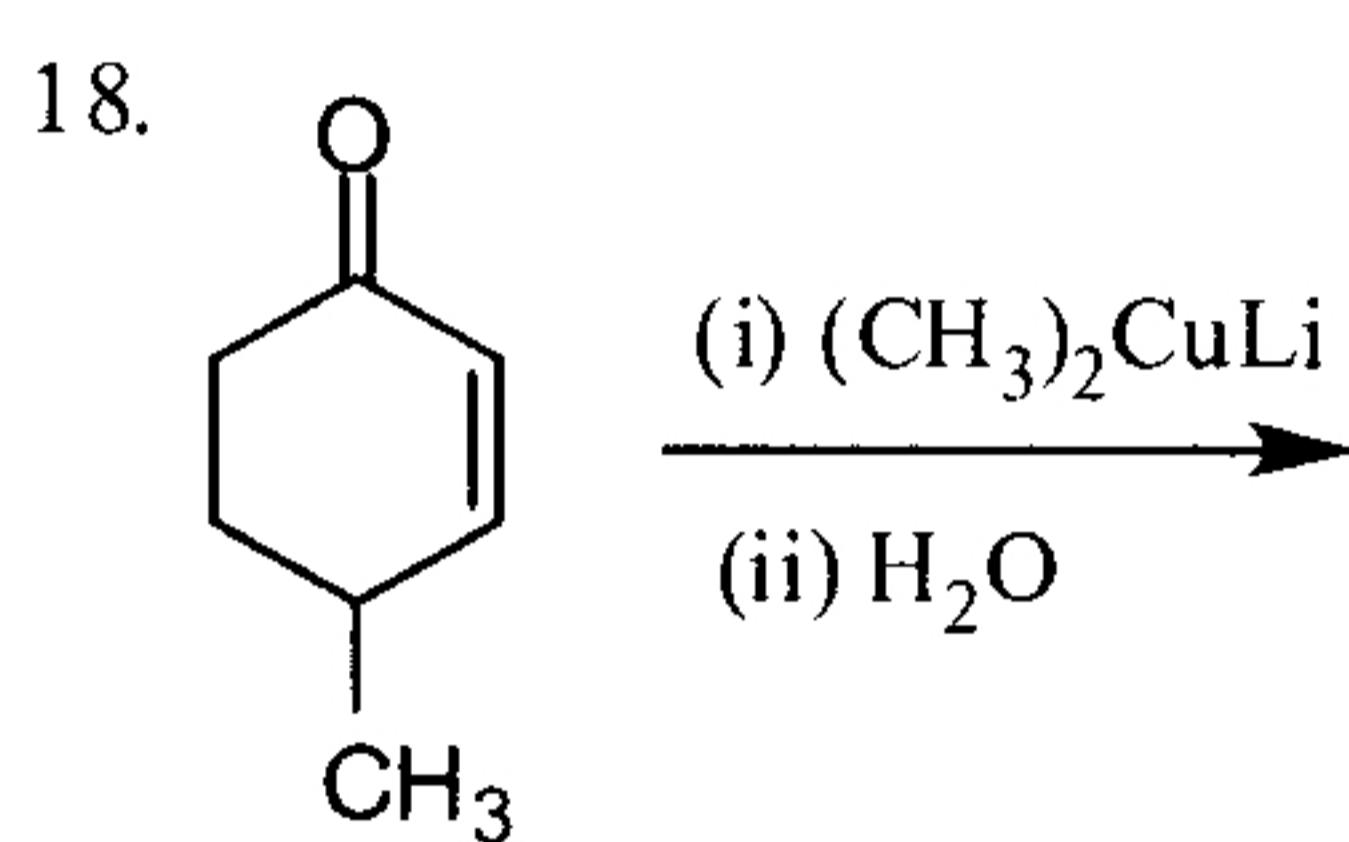
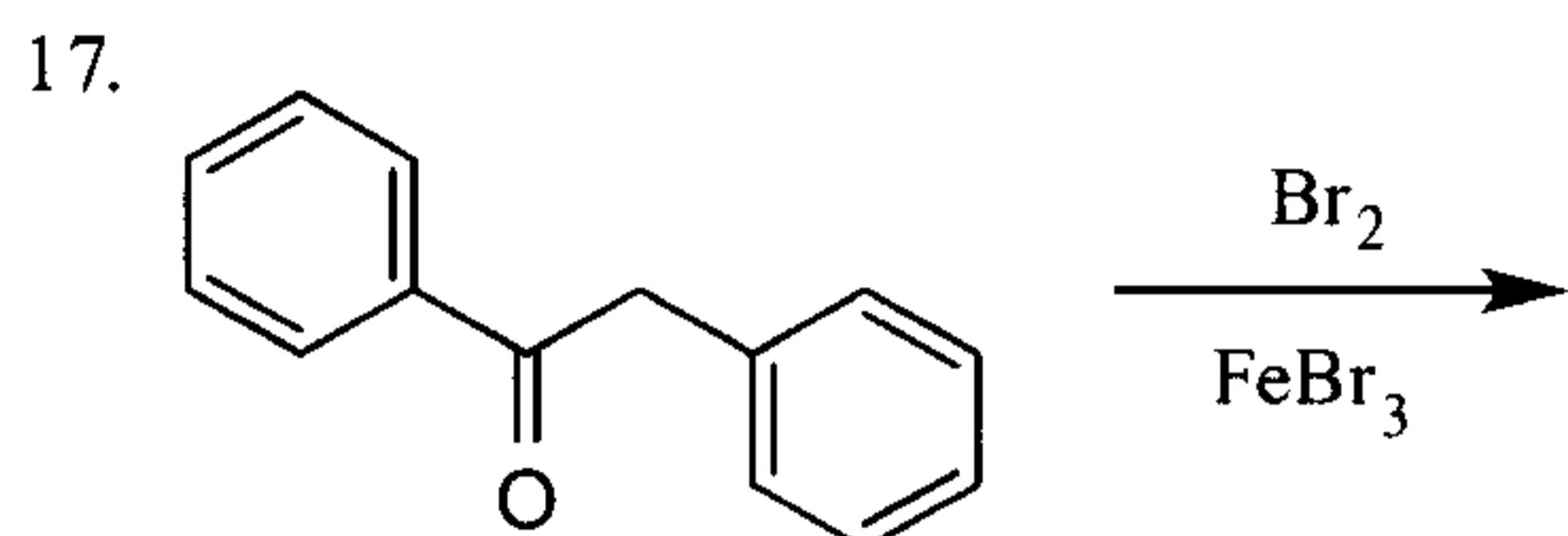
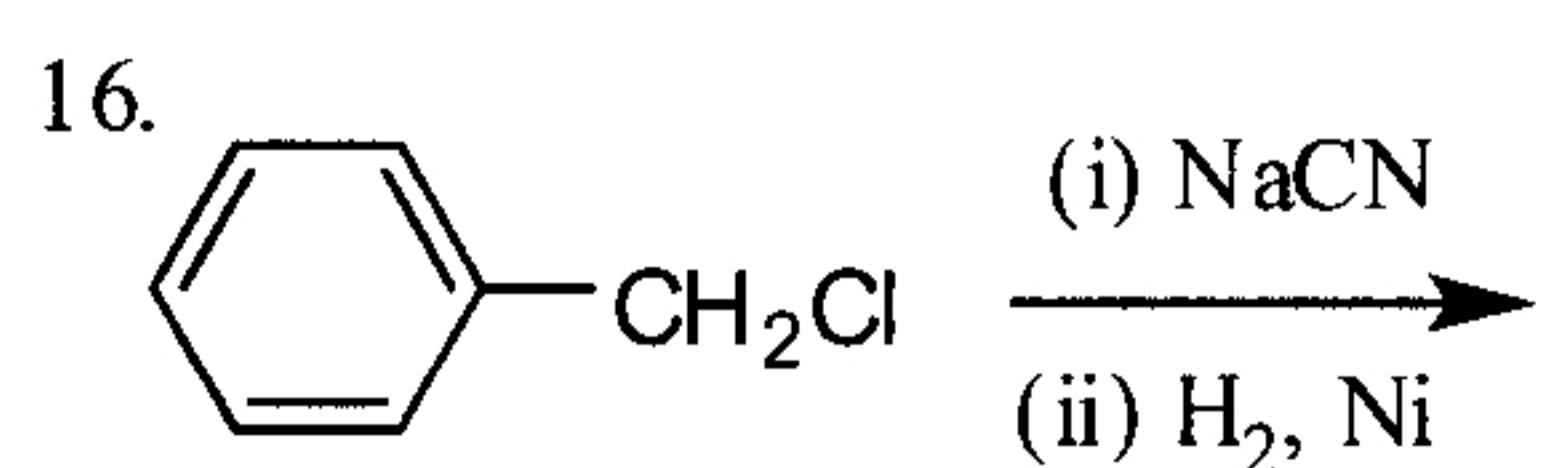
4.



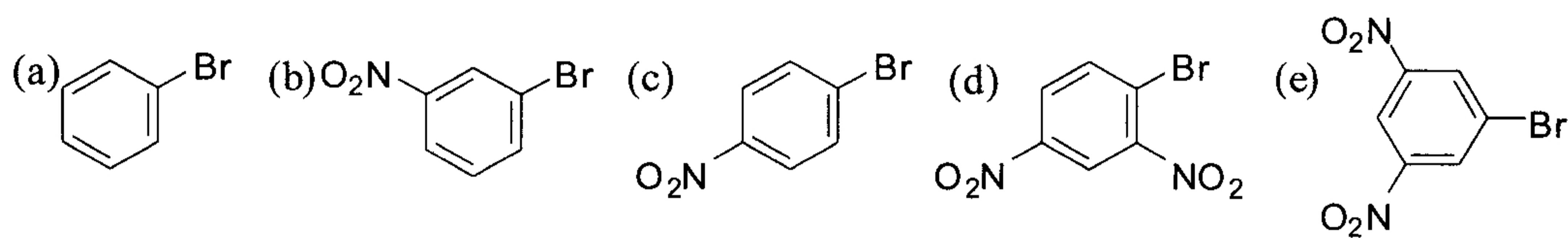
5.



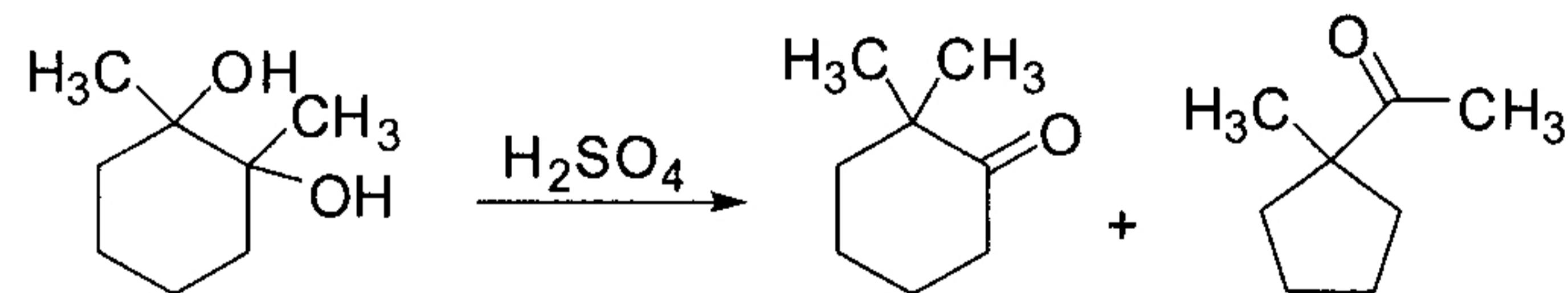




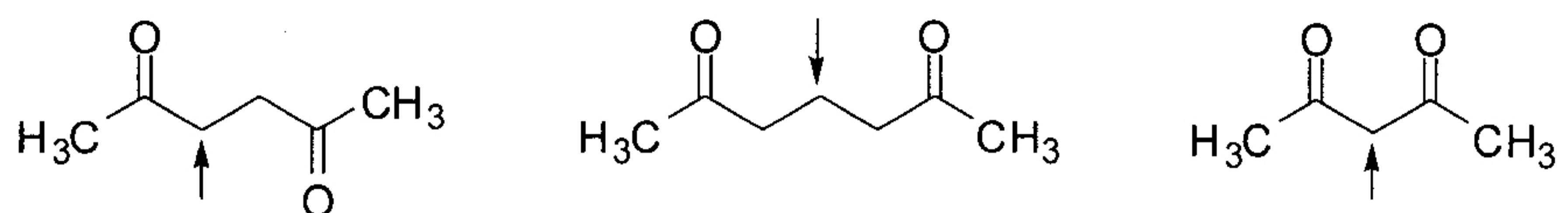
II. Which compound reacts most rapidly with CH_3ONa ? Explain the result.



III. Write a reasonable and detailed mechanism for the following transformation.



IV. Rank the following compounds in order of decreasing the acidity of the indicated hydrogen.



- V. cis-4-Bromocyclohexanol and trans-4-bromocyclohexanol from the same elimination product but a different substitution product when react with OH^- . Explain, by showing the mechanisms, why different substitution products are obtained.

