

國立彰化師範大學 99 學年度碩士班招生考試試題

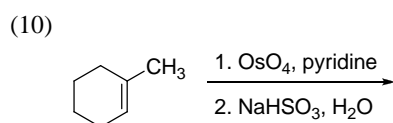
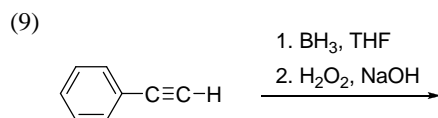
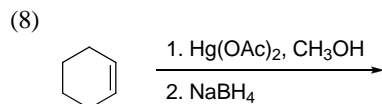
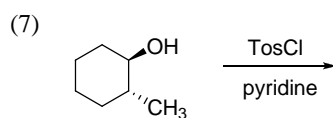
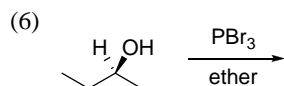
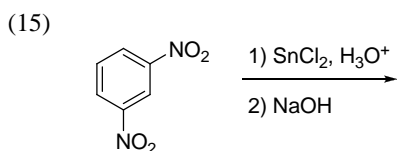
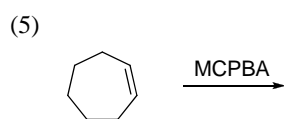
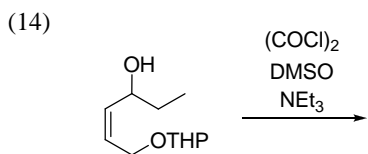
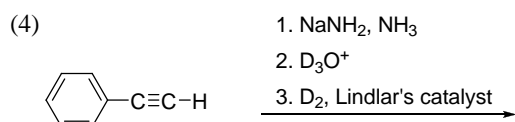
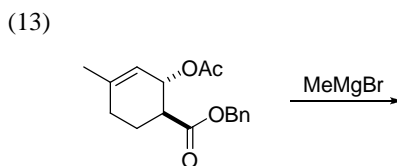
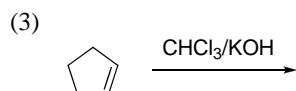
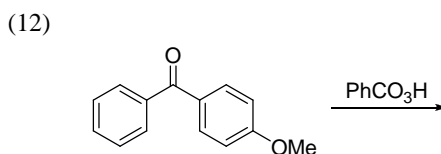
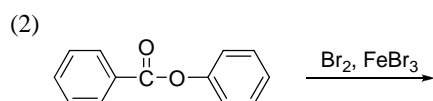
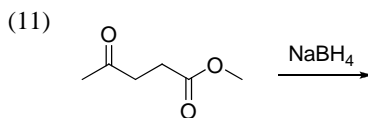
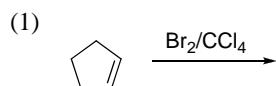
系所： 化學系

科目： 有機化學

☆☆請在答案紙上作答☆☆

共 2 頁，第 1 頁

1. Predict the major products of the following reactions. Be sure to consider stereochemistry in your answer. Label all stereogenic centers in your products: (60%, 4 pts, each)



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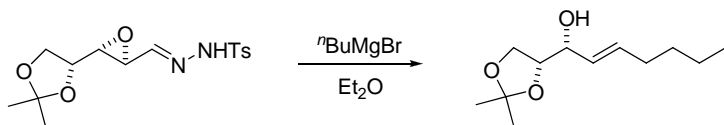
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☆☆請在答案紙上作答☆☆

共 2 頁，第 2 頁

2. Explain the formation of the allylic alcohol product from the reaction shown below. (10%)



3. Draw structures corresponding to the names given. (10%, 5 pts, each)

(1) 1-((1*S*,3*R*)-3-methylcyclohexyl)benzene

(2) *p*-Bromoaniline

4. How do you prepare *m*-hydroxyacetophenone from benzene? Identify the final product and the reagent each reaction in your synthesis scheme. (20%)