

國立彰化師範大學103學年度碩士班招生考試試題

系所： 化學系

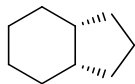
科目： 有機化學

☆☆請在答案紙上作答☆☆

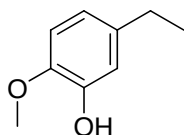
共 2 頁，第 1 頁

I. Give the IUPAC nomenclature of the following structures. (10%)

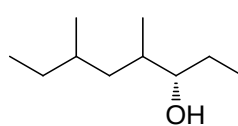
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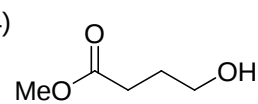
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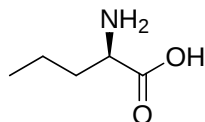
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(4)

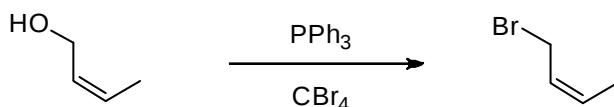


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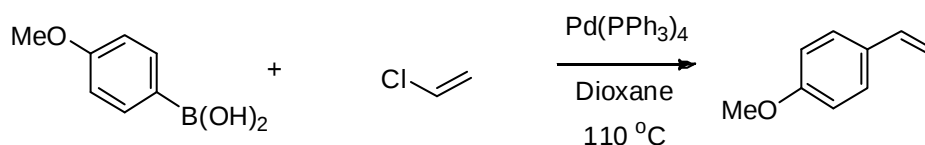


II. Propose mechanisms for the following reactions. (20%)

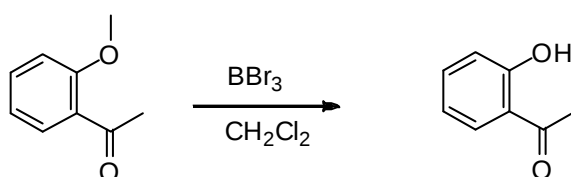
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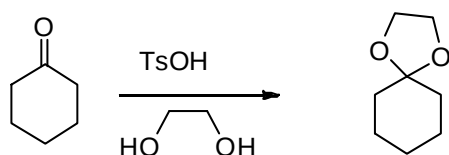
(2)



(3)



(4)



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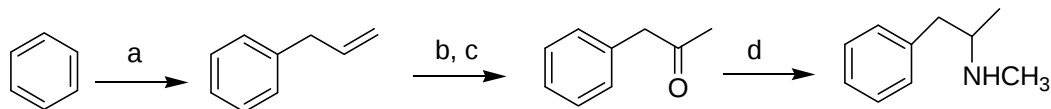
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III. Illustrate the statement of the following terms using an example. (20%)

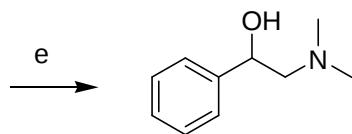
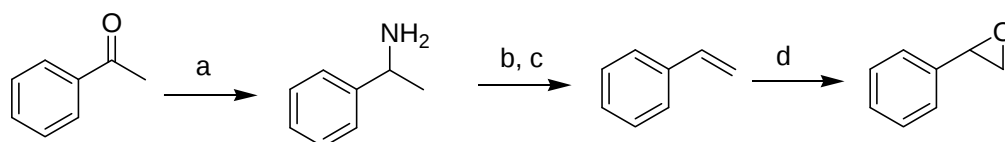
- | | |
|-------------------------|-------------------------------|
| (1) Aldol reactions | (2) Diels-Alder reactions |
| (3) Wittig reactions | (4) Friedel-Crafts acylations |
| (5) Cope rearrangements | |

IV. Fill in the missing reagents a-d or e in the following Scheme: (28%)

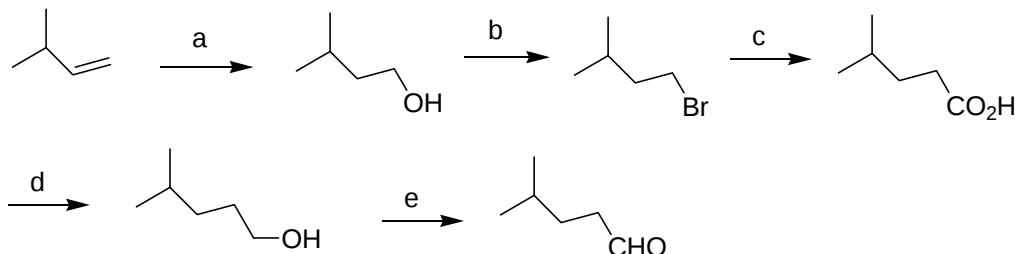
(1)



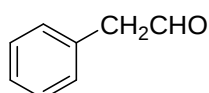
(2)



(3)



V. How would you synthesize the following substance from benzene aldehyde and any other reagents needed? (11%)



VI. Please propose the mechanism for the following reaction. (11%)

