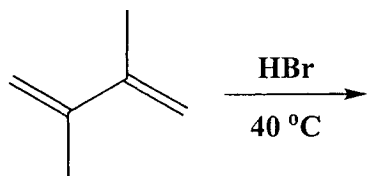


(I) Define the following terms:

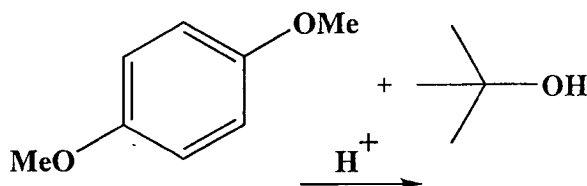
(a) *Organic Chemistry* (5 %)(c) *Markovnikov's rule* (5 %)(e) *CIP system or the R-S system* (6%)(b) *Aromaticity* (5 %)(d) *Conjugated double bonds* (5 %)

(II) Give the structures of the major organic products of the following reactions : 2 points each

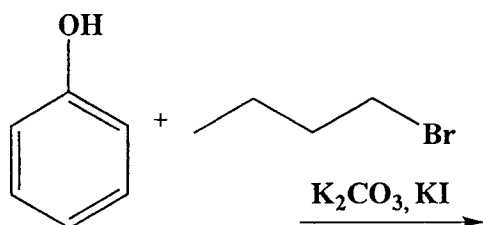
(1)



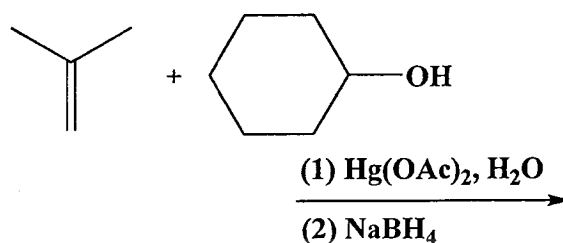
(2)



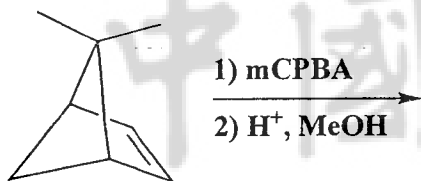
(3)



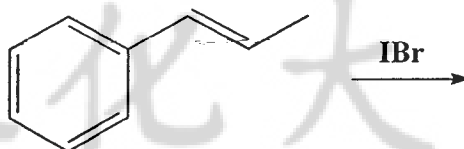
(4)



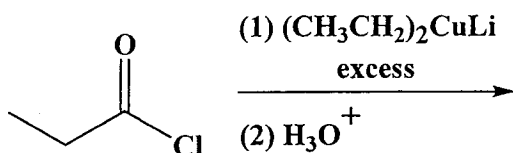
(5)



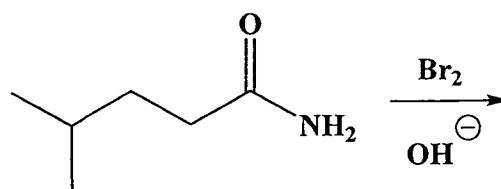
(6)



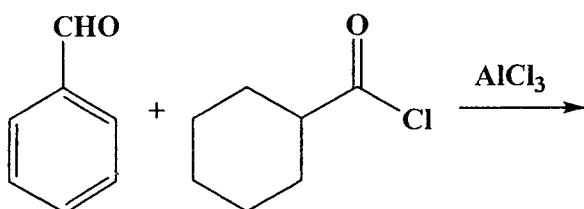
(7)



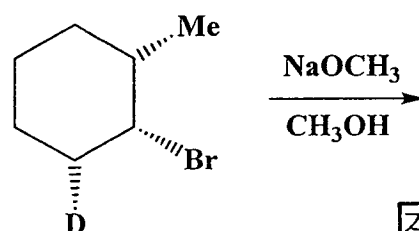
(8)



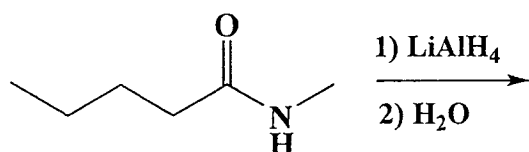
(9)



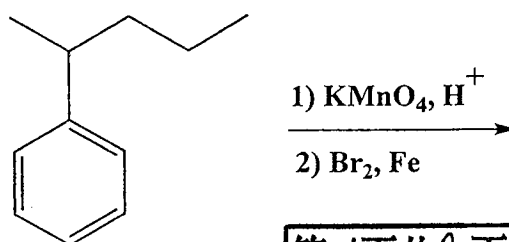
(10)

本試題採
雙面印刷

(11)



(12)



第 1 頁共 2 頁

二

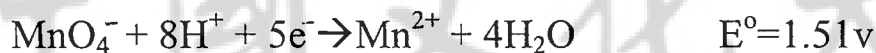
分析化學(50%)可以使用非記憶型計算機

1. (30%,每一小題 3%)請解釋下列名詞

- | | |
|---------------------------|-------------------------|
| a. P functions | b. Beer's law |
| c. Acid Rain | d. Nernst equation |
| e. Le Châtelier Principle | f. Van Deemter equation |
| g. Parts per million | h. NMR |
| i. Normal error curve | j. TGA |

2. (5%)請由 71.0% ,HClO₄(w/w)比重為 1.67 試劑,配 2.00L,濃度為 0.120M HClO₄ 溶液.

3. (5%)請由下列兩半反應,計算 全反應電位 與 平衡常數



4. (5%)於 AA 測試中,若產生光譜干擾現象,請問有哪些方法可以做校正之?

5. (5%)請繪出 pH meter 所使用之 glass electrode 的結構與其運作原理.