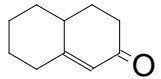
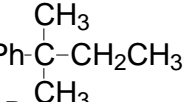
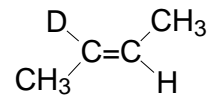
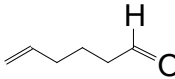
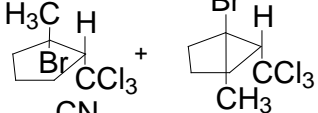
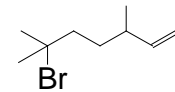
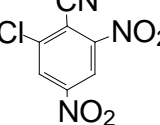
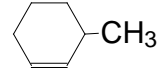
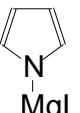

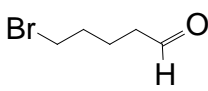

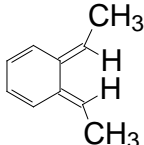


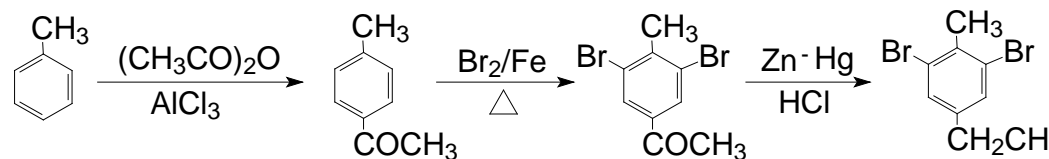
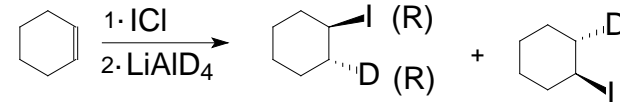
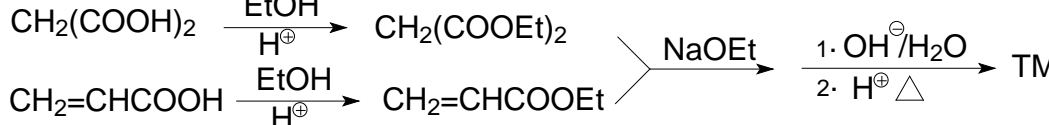
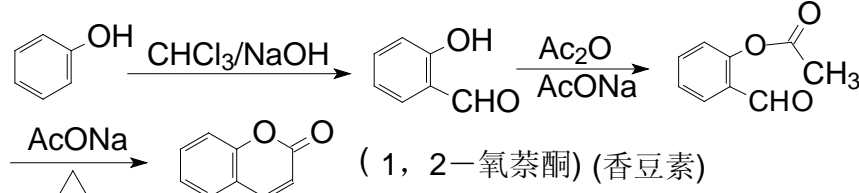
# 复旦大学研究生入学考试 1992

## 有机化学试题解答

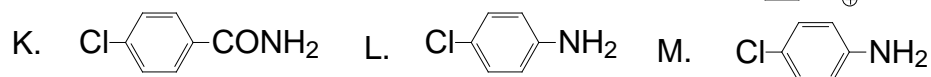
一，在下列括号内填入合适的反应条件或产物 ( $2 \times 2 = 40$ )

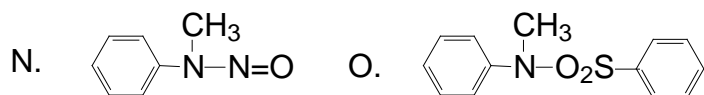
- $\text{CH}_3\text{COCH}_3/\text{浓HCl}$
- 
- $2\text{HCOOH} + \text{HCHO} + \text{OHCCH}_2\text{CHO}$
- $\text{NaCN}/\text{HCl}$
- $\text{PhNHCOOEt}$
- 
- 
- 
-  及其对映体
- 
- 
- $\text{HOCH}_2\text{CH}_2\text{COO}^-$
- 
-  +  $\text{CH}_4$
- 
- $\text{PhCOOH} + \text{tert-C}_4\text{H}_9\text{OH}$
- $\text{Me}_2\text{C}=\text{CMe}_2$
- 
- 
- 

二，写出下列合成反应式，除指定有机原料外，还可使用其他必要的有机或无机试剂 ( $4 \times 4 = 16$ )

- 
- 
- 
-  (1,2-氧萘酮) (香豆素)

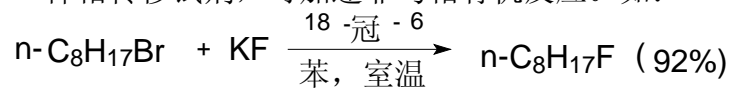
三，写出下列反应机理 ( $4 \times 4 = 16$ )



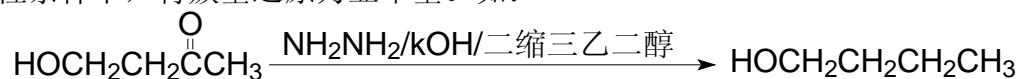


**五、各举一例说明下列试剂在有机合成中的应用 (2×6=12)**

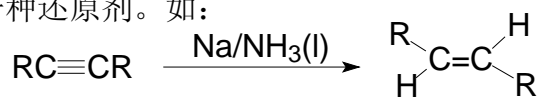
1. 冠醚：一种相转移试剂，可加速非均相有机反应。如：



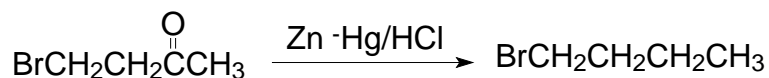
2. 碱性条件下，将羰基还原为亚甲基。如：



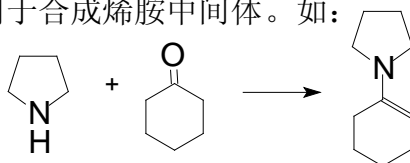
3. 一种还原剂。如：



4. 酸性条件下，将羰基还原为亚甲基。如：



5. 可用于合成烯胺中间体。如：



6. 相对温和的氧化剂，可将醇氧化为醛。如：

