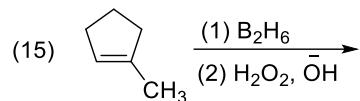
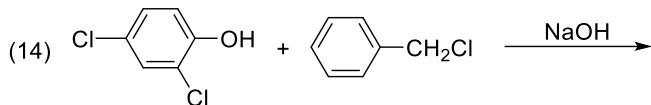
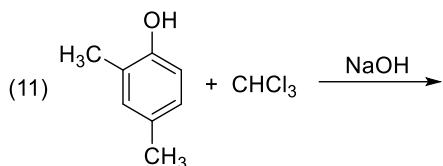
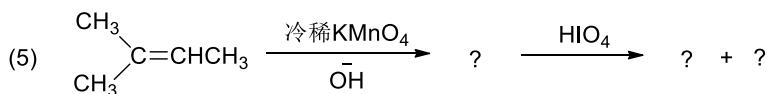
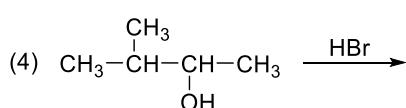
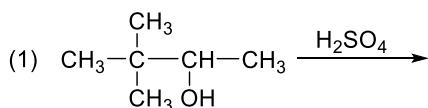


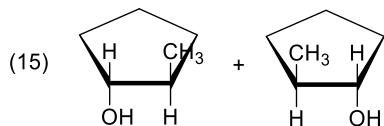
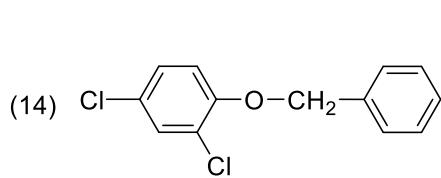
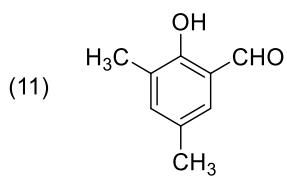
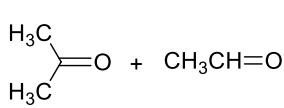
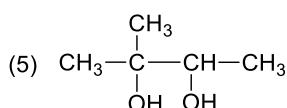
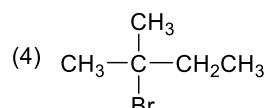
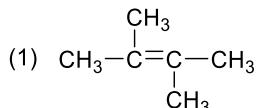
第十四次作业答案

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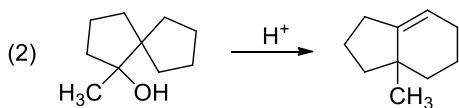
6. 完成下列各反应:



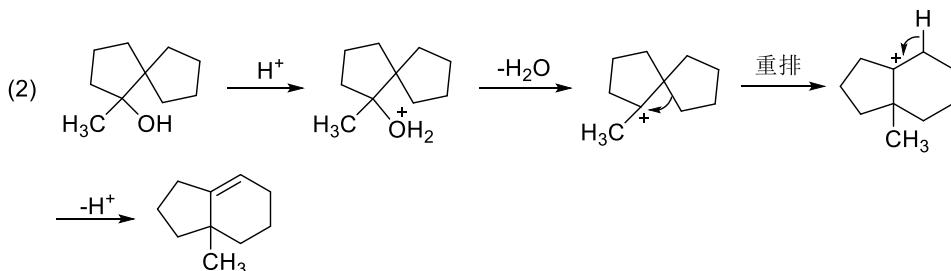
解答:



7. 用历程解释下列反应:



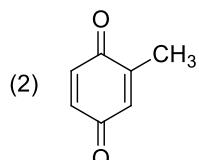
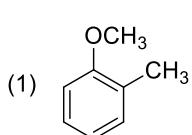
解答：



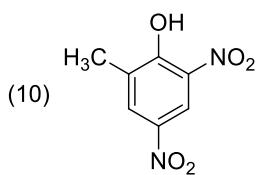
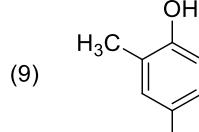
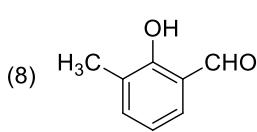
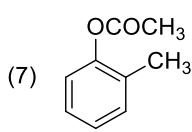
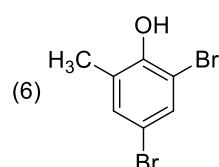
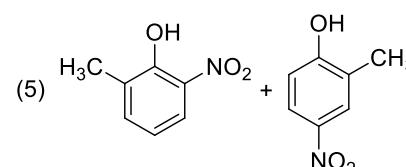
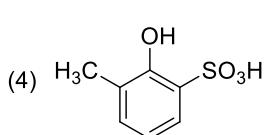
8. 写出邻甲苯酚与下列试剂反应的主要有机产物，如不反应请用“NR”表示：

- | | | |
|----------------------------|-------------------------------|---------------------------------|
| (1) $(CH_3O)_2SO_2$, NaOH | (2) $Na_2Cr_2O_7$, H_2SO_4 | (3) CH_3COOH , H_2SO_4 , 加热 |
| (4) 98% H_2SO_4 , 25°C | (5) 冷、稀 HNO_3 | (6) Br_2/H_2O |
| (7) $(CH_3CO)_2O$ | (8) $CHCl_3$, 浓 $NaOH$, 加热 | (9) $HONO$ |
| (10) HNO_3 (2 mol)/HOAc | (11) HBr , 加热 | (12) CO_2 , K_2CO_3 , 240°C |

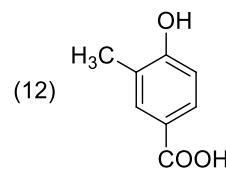
解答：



(3) NR

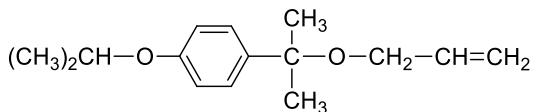


(11) NR

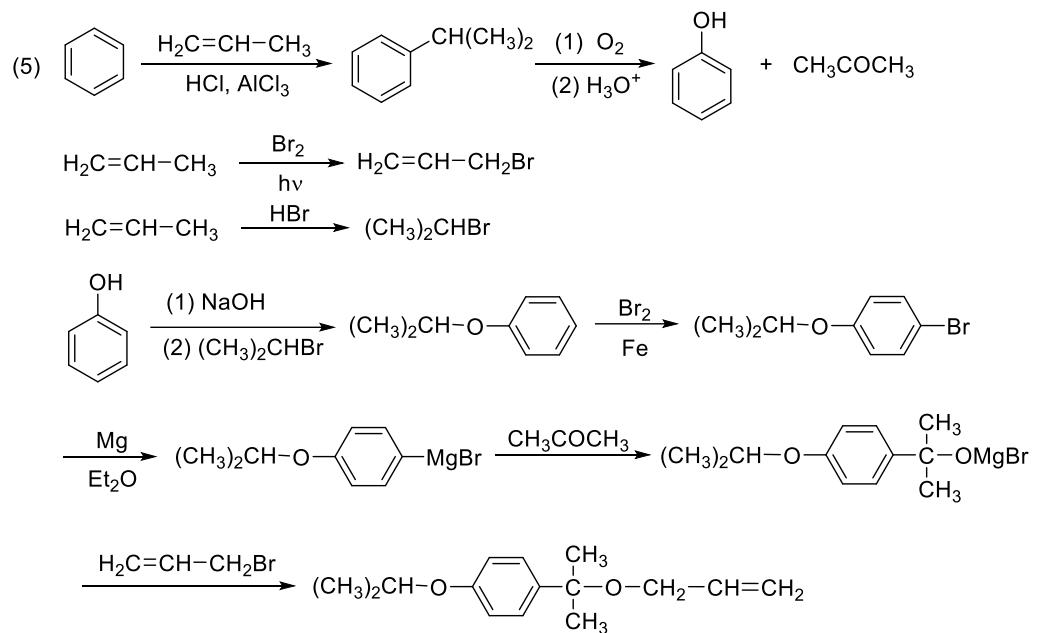


12. 利用指定原料进行合成（无机试剂和 C_2 及以下的有机试剂可以任选）：

- (5) 用丙烯和苯合成



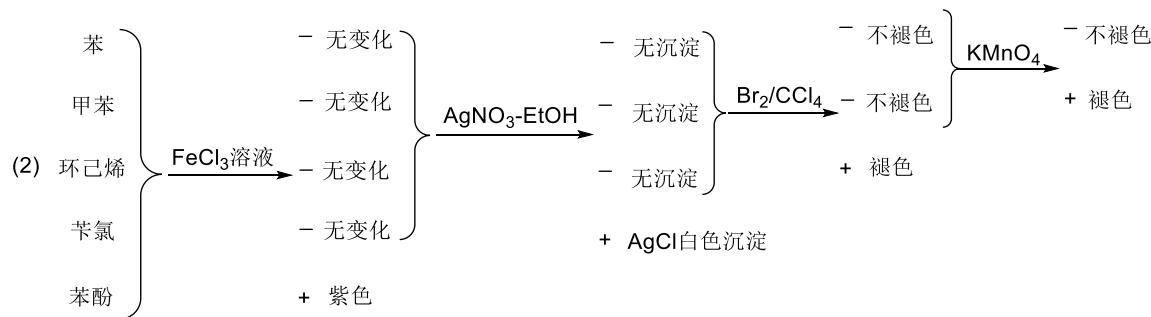
解答：



14. 用化学方法鉴别下列各组化合物：

(2) 苯、环己烯、甲苯、苄氯、苯酚

解答：



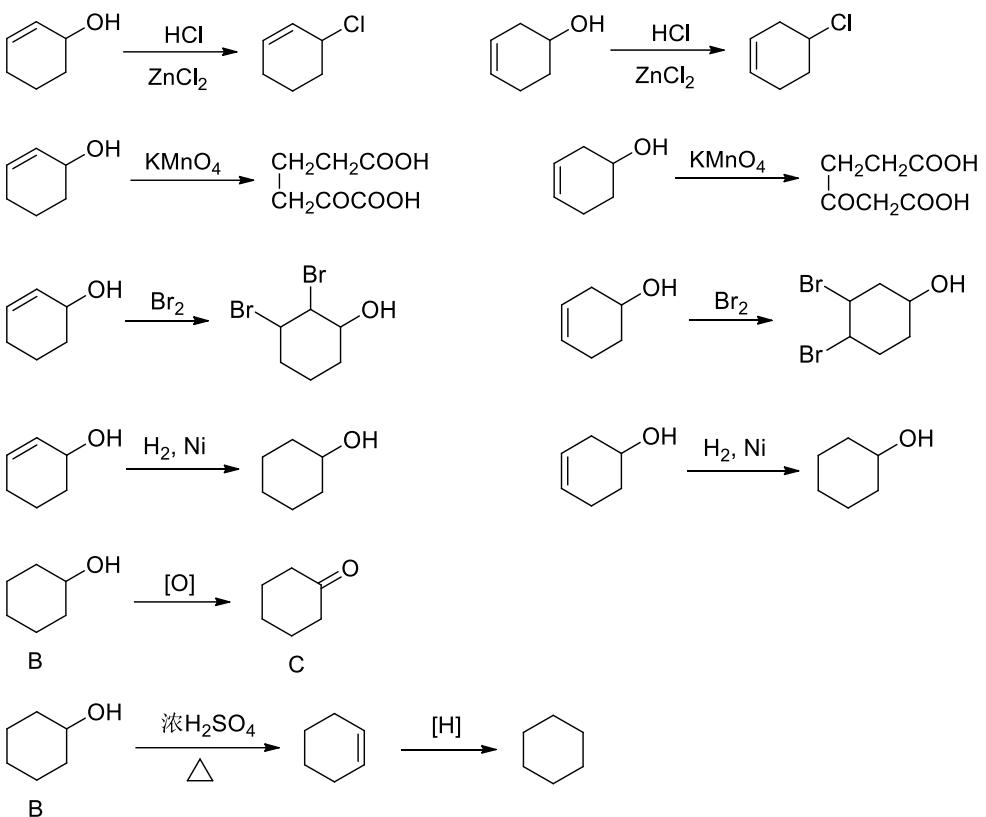
15. 分子式为 $\text{C}_6\text{H}_{10}\text{O}$ 的化合物 A，能与卢卡斯试剂反应，亦可被 KMnO_4 氧化，并能吸收

1 mol Br_2 ，A 经催化加氢得 B，将 B 氧化得 C（分子式为 $\text{C}_6\text{H}_{10}\text{O}$ ），将 B 在加热下与浓硫酸作用的产物还原可得到环己烷。试推测 A 可能的结构，写出各步反应式。

解答：根据题意推测出化合物 A 的可能结构如下：



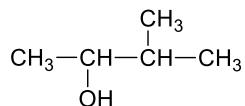
各步的反应式如下：



17. 分子式为 $C_5H_{12}O$ 的一般纯度的醇，具有下列 1H NMR 数据，试写出该醇的结构式。

δ 值	质子数	信号类型
(a) 0.9	6	二重峰
(b) 1.6	1	多重峰
(c) 2.6	1	单峰
(d) 3.6	1	八重峰
(e) 1.1	3	二重峰

解答：根据化合物的分子式及核磁共振氢谱数据推测出该醇的结构如下：



其核磁共振氢谱的归属如下：

