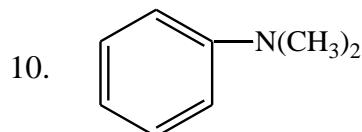
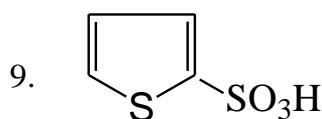
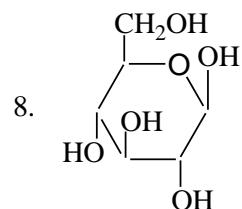
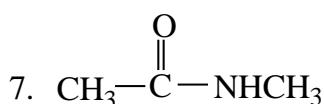
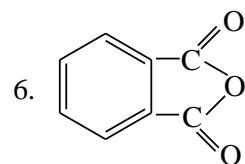
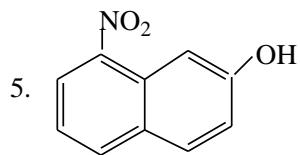
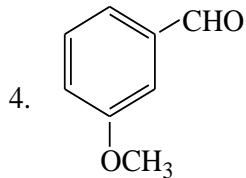
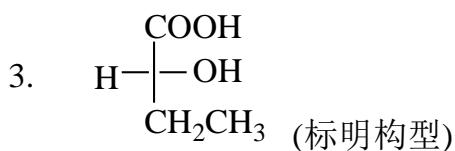
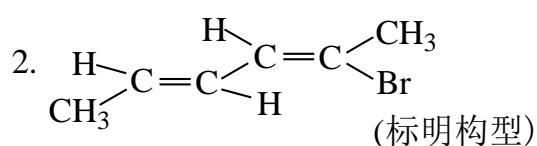
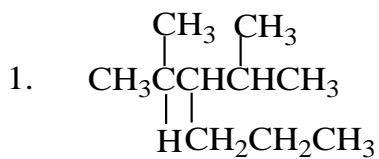


《有机化学》练习题（一）

一、 命名下列化合物（每小题 1 分，共 10 分）.

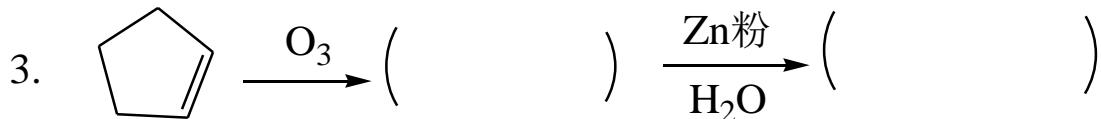
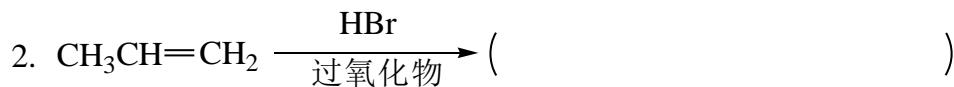
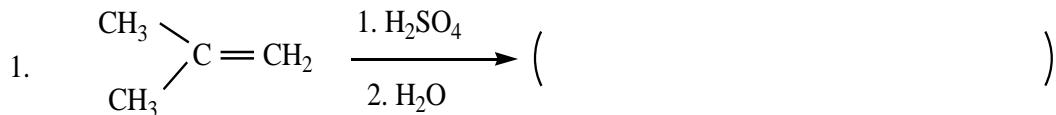


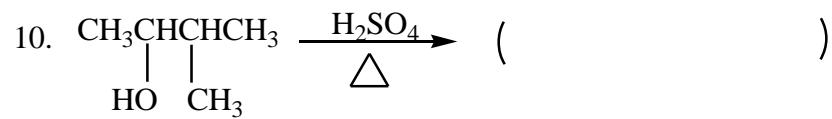
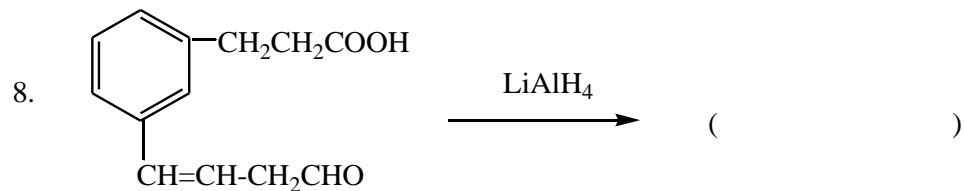
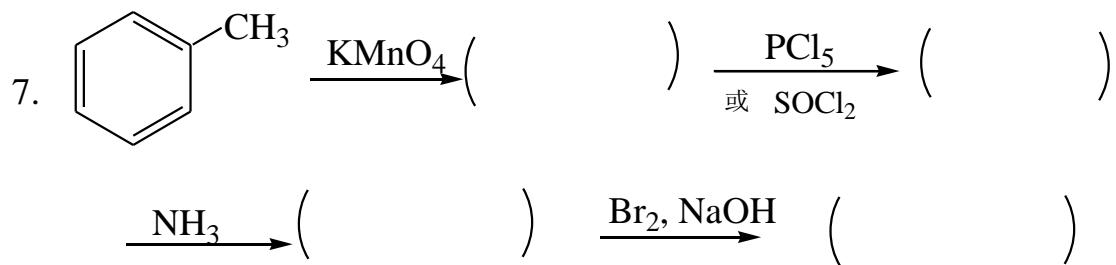
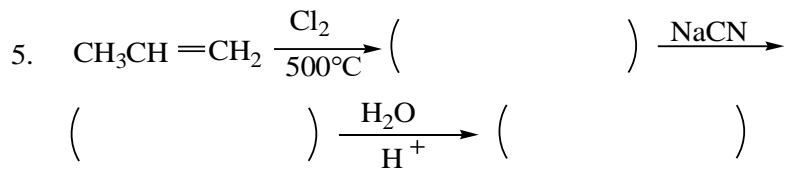
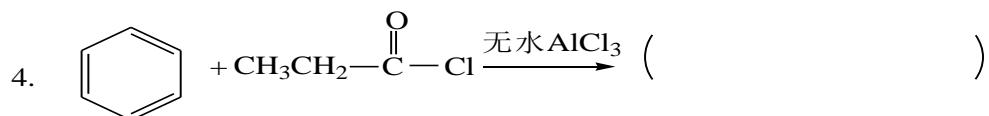
二、写出下列化合物的结构式（每小题 1 分，共 5 分）

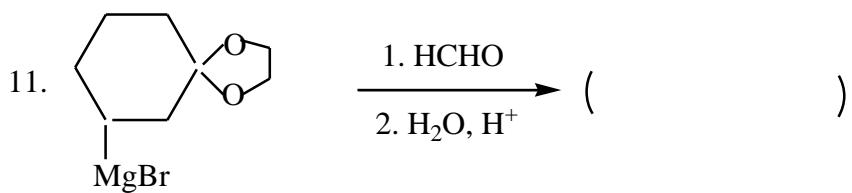
1. 烯丙基仲丁基醚 2. 顺-1-甲基-4-叔丁基环己烷的稳定构象式

3. 苄氯 4. 尿素 5. 4-甲基苯磺酰氯

三、完成下列化学反应式（每空格 1 分，共 20 分）

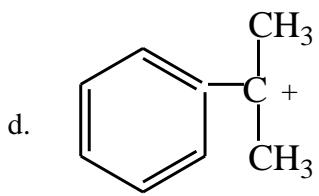
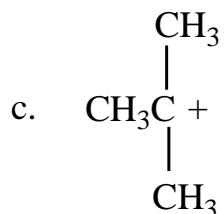




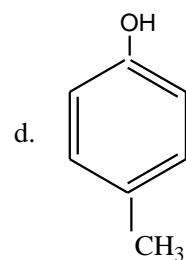
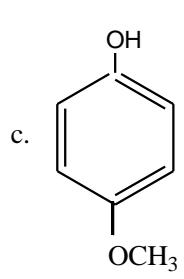
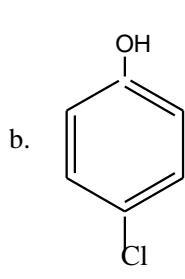
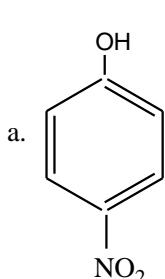


四、选择或比较题（每小题 2 分，共 20 分）

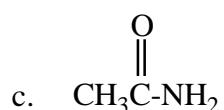
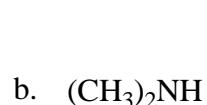
1、下列碳正离子中，稳定性最大的是（ ）



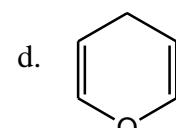
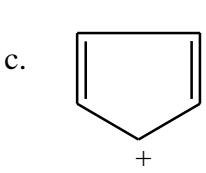
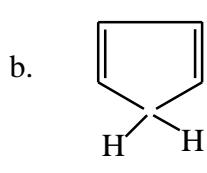
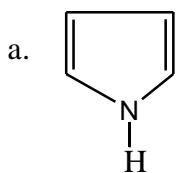
2、下列化合物中，酸性最强的是（ ）



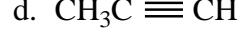
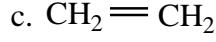
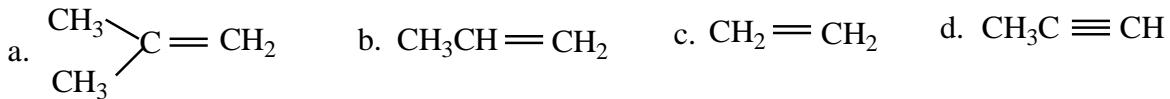
3、下列化合物中，碱性最强的是（ ）



4、下列化合物或离子中，具有芳香性的是（ ）

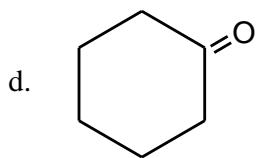
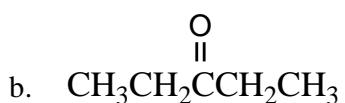
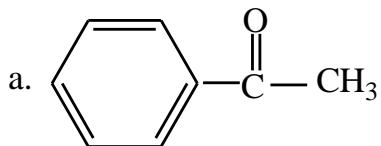


5、下列化合物发生亲电加成反应，速度最快的是（ ）

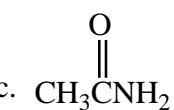
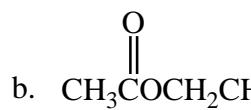
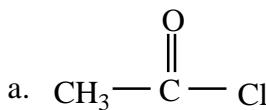


6、下列化合物中，既能发生碘仿反应又能与饱和的 NaHSO_3 溶液作

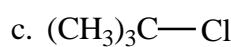
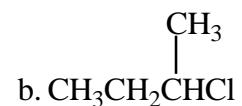
用的是()



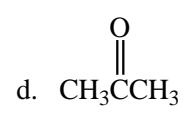
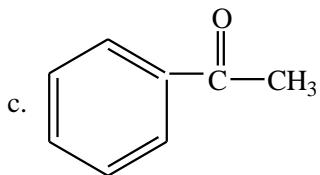
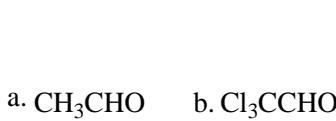
7、比较下列化合物发生水解或醇解反应的速度()



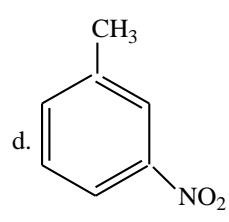
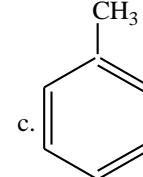
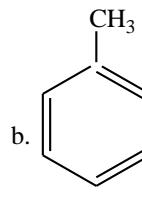
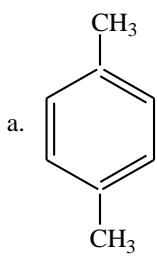
8、比较下列化合物按 S_N1 历程进行水解反应的速度()



9、比较下列化合物发生亲核加成反应的速度()



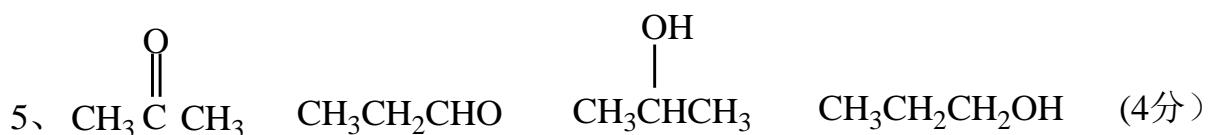
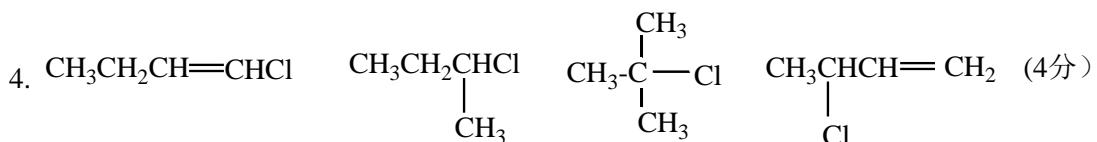
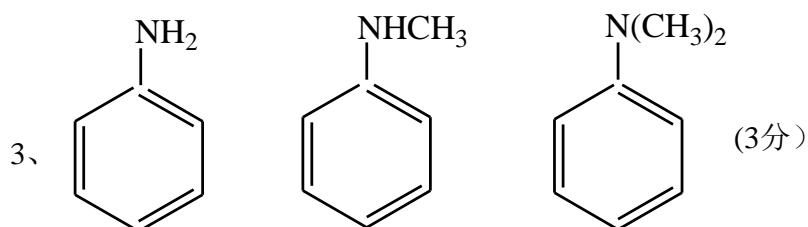
10、比较下列化合物进行卤代或硝化或磺化反应的速度()



五、用化学方法鉴别下列各组化合物(15分)

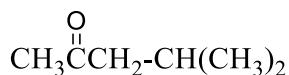
1、D-甘露糖，D-果糖(2分)

2、甲酸，乙酸(2分)



六、用指定原料合成下列化合物（无机试剂、催化剂、有机溶剂任选）
(每小题 5 分，共 15 分)

1、由乙酰乙酸乙酯和丙烯为原料合成



2、由乙烯为原料合成正丁醇 ($\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{OH}$)



七、推断结构式 (15 分)

1、某化合物的分子式为 $\text{C}_6\text{H}_{12}\text{O}$, 能与羟胺作用生成肟, 但不能起银镜反应。催化加氢则得到醇, 此醇经脱水、臭氧化还原水解后得到两种液体, 其中之一能起银镜反应, 但不起碘仿反应; 另一种有碘仿反应, 但不能还原 Fehling 试剂。试推导该化合物的结构式并写出反应式。

(8 分)

2、某化合物 A 的分子式为 $\text{C}_7\text{H}_8\text{O}$, 不溶于 NaOH 水溶液, 与金属 Na 不发生反应, 但能与浓的 HI 反应生成两个化合物 B 和 C。B 与 FeCl_3

溶液发生显色反应，也能溶于 NaOH 溶液；C 与 AgNO₃ 的乙醇溶液作用，生成黄色的 AgI。试推导 A,B,C 的可能结构式并写出各步反应式。(7 分)