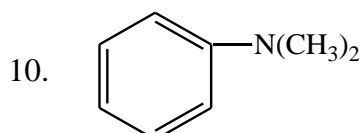
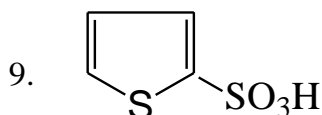
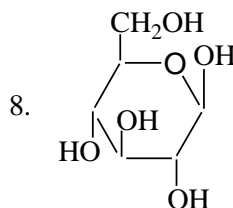
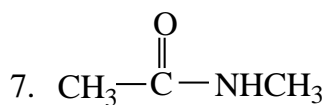
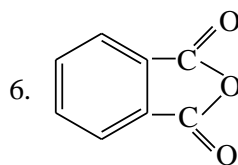
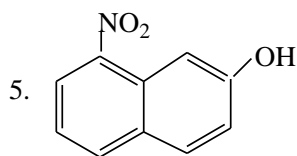
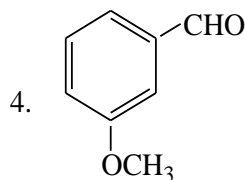
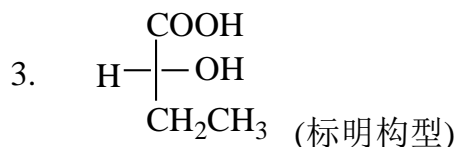
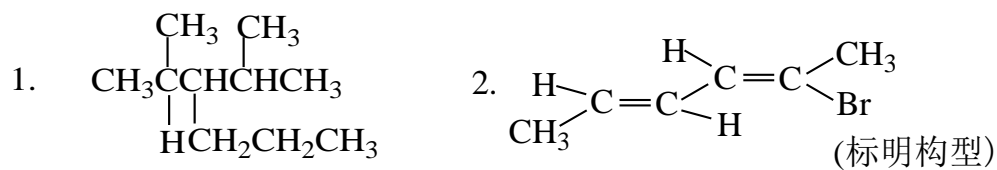


## 《有机化学》练习题（一）

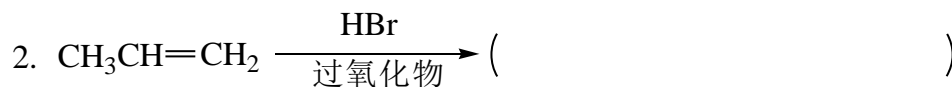
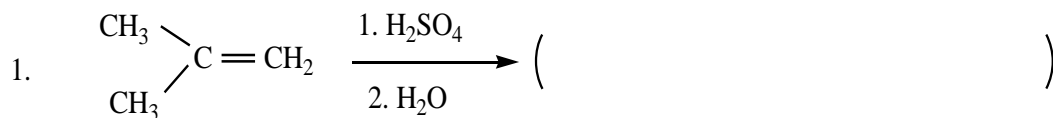
一、命名下列化合物（每小题 1 分，共 10 分）。

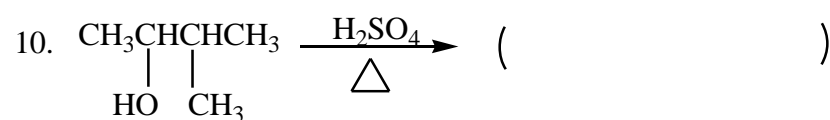
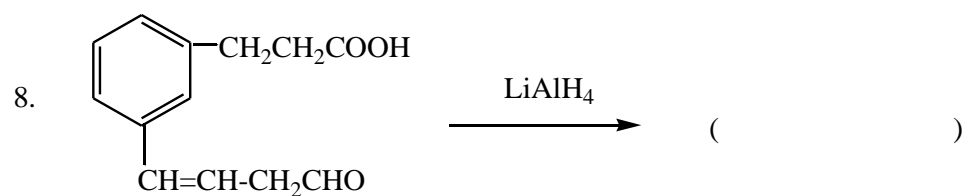
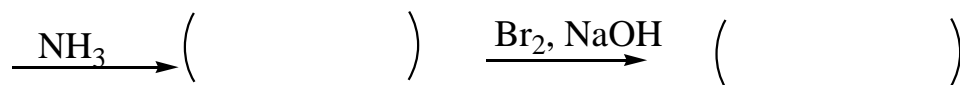
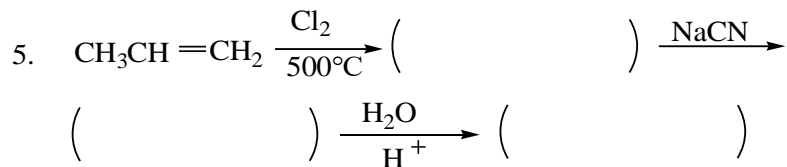
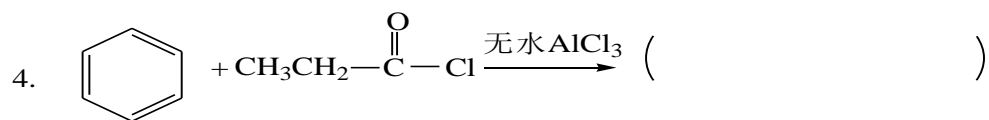


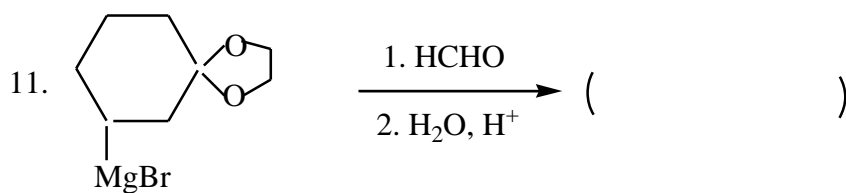
二、写出下列化合物的结构式（每小题 1 分，共 5 分）

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. 苕氯    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）

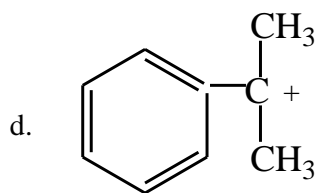
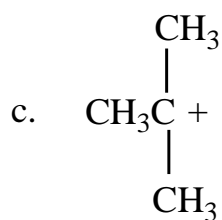
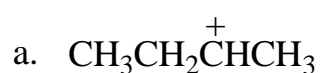




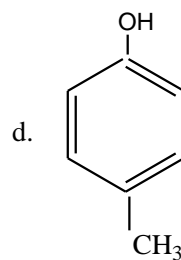
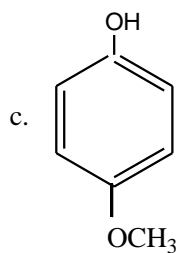
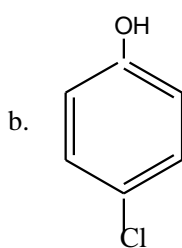
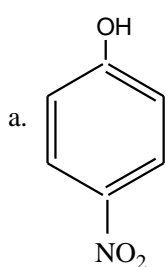


四、选择或比较题（每小题 2 分，共 20 分）

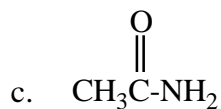
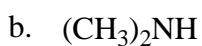
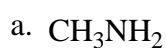
1、下列碳正离子中，稳定性最大的是（ ）



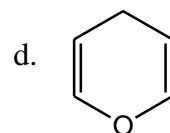
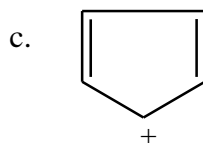
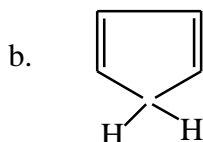
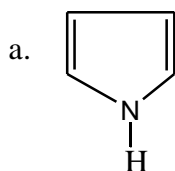
2、下列化合物中，酸性最强的是（ ）



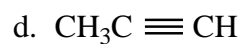
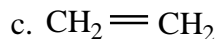
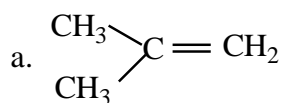
3、下列化合物中，碱性最强的是（ ）



4、下列化合物或离子中，具有芳香性的是（ ）

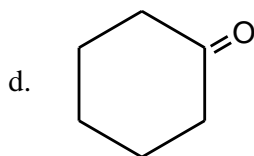
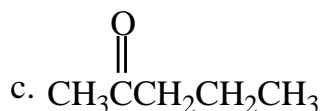
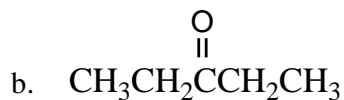
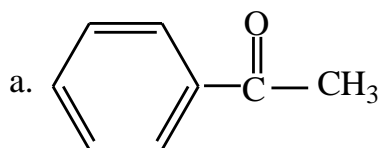


5、下列化合物发生亲电加成反应，速度最快的是（ ）

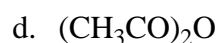
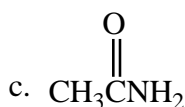
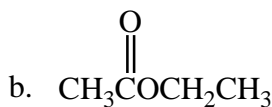
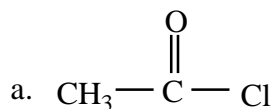


6、下列化合物中，既能发生碘仿反应又能与饱和的  $\text{NaHSO}_3$  溶液作

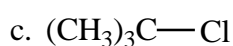
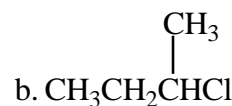
用的是 ( )



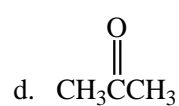
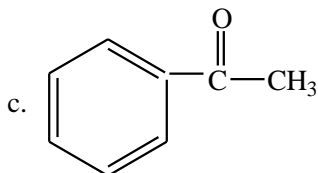
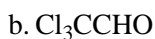
7、比较下列化合物发生水解或醇解反应的速度 ( )



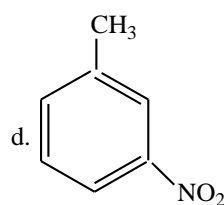
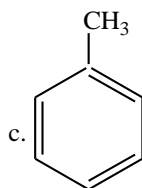
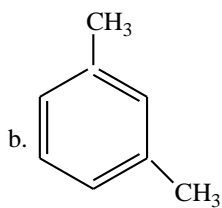
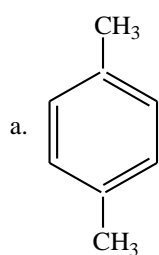
8、比较下列化合物按  $\text{S}_{\text{N}}1$  历程进行水解反应的速度 ( )



9、比较下列化合物发生亲核加成反应的速度 ( )



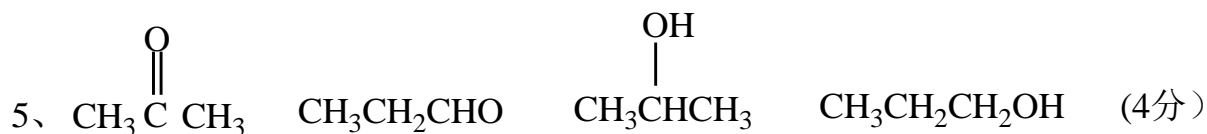
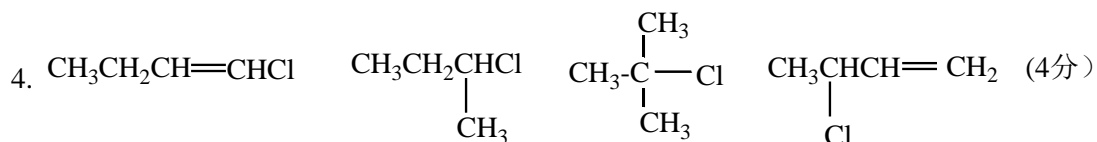
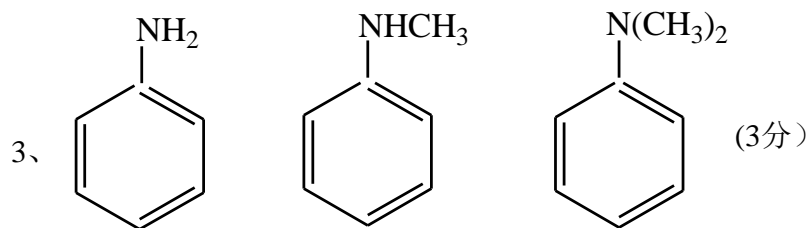
10、比较下列化合物进行卤代或硝化或磺化反应的速度 ( )



五、用化学方法鉴别下列各组化合物 (15 分)

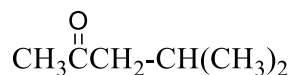
1、D-甘露糖，D-果糖 (2 分)

2、甲酸，乙酸 (2 分)

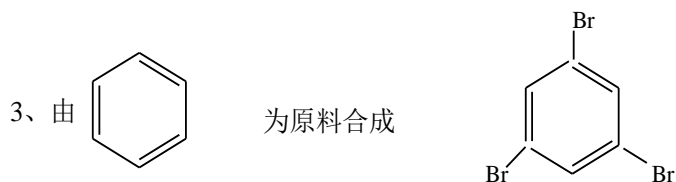


六、用指定原料合成下列化合物（无机试剂、催化剂、有机溶剂任选）  
（每小题 5 分，共 15 分）

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  $\text{NaOH}$  水溶液，与金属  $\text{Na}$  不发生反应，但能与浓的  $\text{HI}$  反应生成两个化合物 B 和 C。B 与  $\text{FeCl}_3$

溶液发生显色反应，也能溶于 NaOH 溶液；C 与  $\text{AgNO}_3$  的乙醇溶液作用，生成黄色的  $\text{AgI}$ 。试推导 A,B,C 的可能结构式并写出各步反应式。（7 分）