

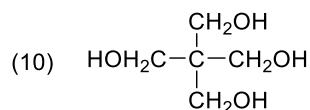
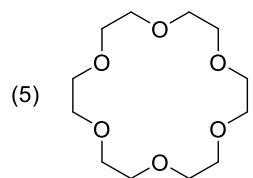
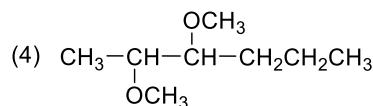
## 第十五次作业答案

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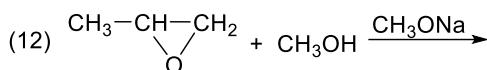
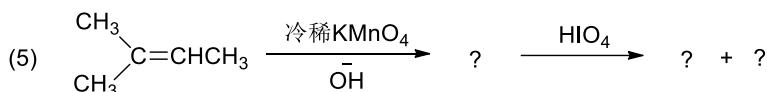
2. 写出下列化合物的构造式:



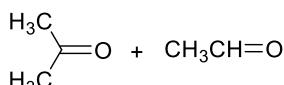
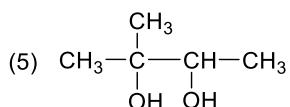
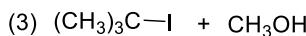
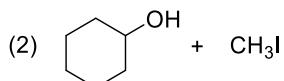
解答:

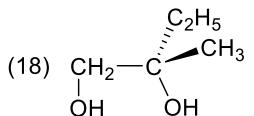
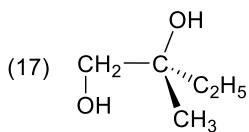
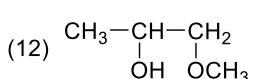
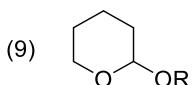
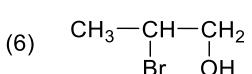


6. 完成下列各反应:

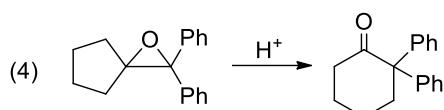


解答:

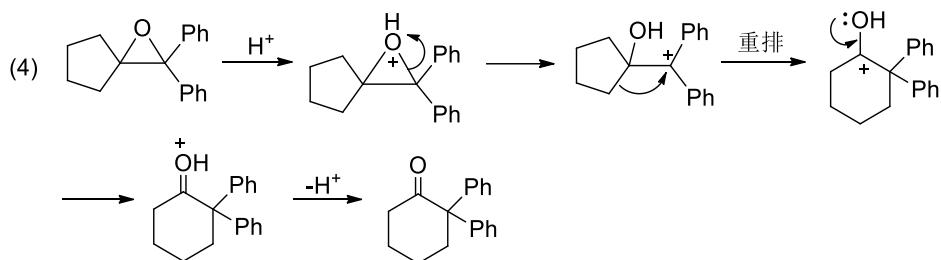




7. 用历程解释下列反应:



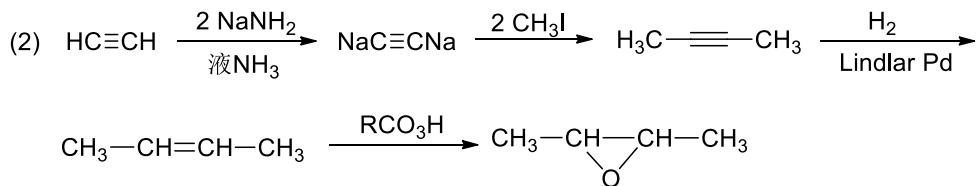
解答:



12. 利用指定原料进行合成 (无机试剂和 C<sub>2</sub> 及以下的有机试剂可以任选):

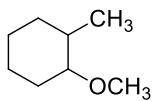


解答:

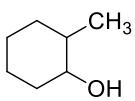


18. 某化合物分子式为 C<sub>8</sub>H<sub>16</sub>O (A), 不与 Na、NaOH 及 KMnO<sub>4</sub> 反应, 而能与浓氢碘酸作用生成化合物 C<sub>7</sub>H<sub>14</sub>O (B), B 与浓硫酸共热生成化合物 C<sub>7</sub>H<sub>12</sub> (C), C 经臭氧化水解后得产物 C<sub>7</sub>H<sub>12</sub>O<sub>2</sub> (D), D 的 IR 图上在 1750 ~ 1700 cm<sup>-1</sup> 处有强吸收峰, 而在 <sup>1</sup>H NMR 图中有两组峰具有如下特征: 一组为(1H)的三重峰 ( $\delta$  值 10), 另一组是(3H)的单峰 ( $\delta$  值 2)。C 在过氧化物存在下与 HBr 作用得 C<sub>7</sub>H<sub>13</sub>Br (E), E 经水解得化合物 B。请推测出化合物 A~E 的结构式, 并用反应式表示上述变化过程。

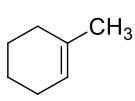
解答：根据题意推测出化合物 A~E 的结构如下：



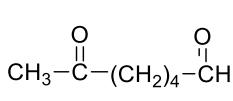
A



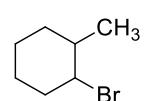
B



C



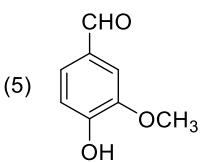
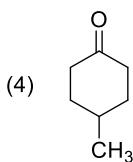
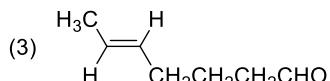
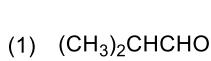
D



E

### P416

1. 用系统命名法命名下列化合物：



解答：

(1) 2-甲基丙醛

(2) 2-甲基-3-戊酮

(3) (E)-5-庚烯醛

(4) 4-甲基环己酮

(5) 4-羟基-3-甲氧基苯甲醛