



الإجابة النموذجية لامتحان الكيمياء العضوية الالفاتية
كود المادة: 217ك

(ورقة امتحانية كاملة)

المستوى : الثانى

الشعبة: ميكرو بيولوجى وكيمياء والشعب المزدوجة

التاريخ : الاربعاء 2019/1/23

الممتحن : أ.د علي عبدالمعبود علي

قسم : الكيمياء

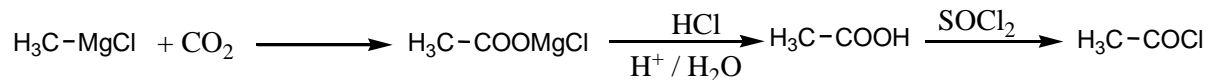
كلية : العلوم

I- Starting from CH₃MgCl how you can prepare the following: (12 Marks)

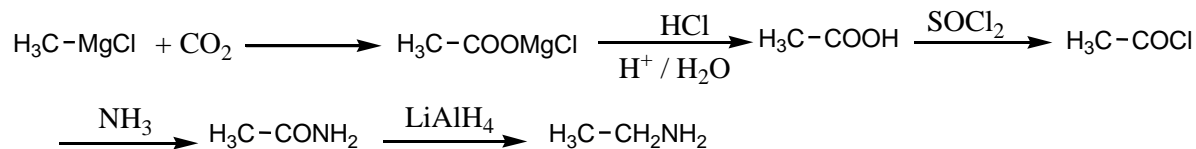
a. CH₃COOH



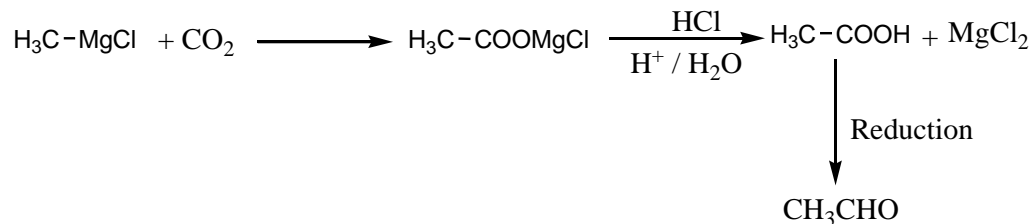
b. CH₃COCl



c. CH₃CH₂NH₂



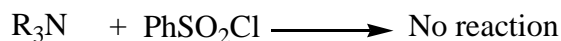
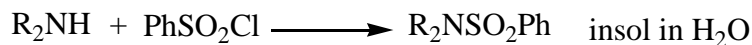
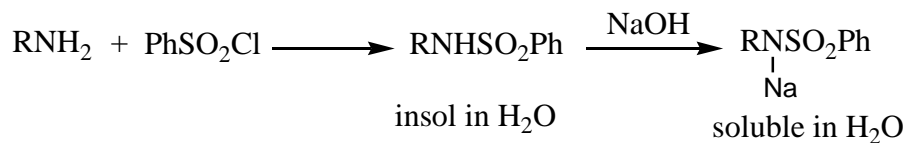
d. CH₃CHO



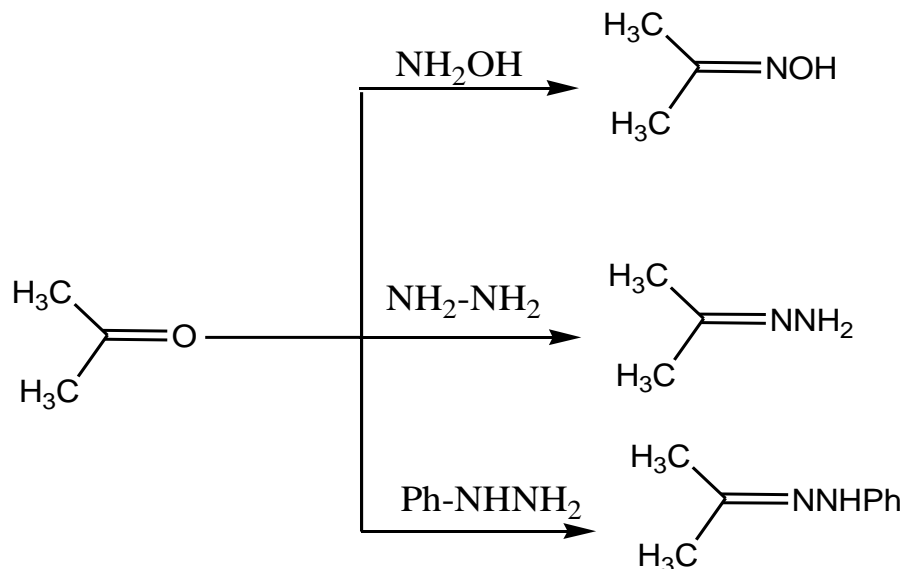
Or



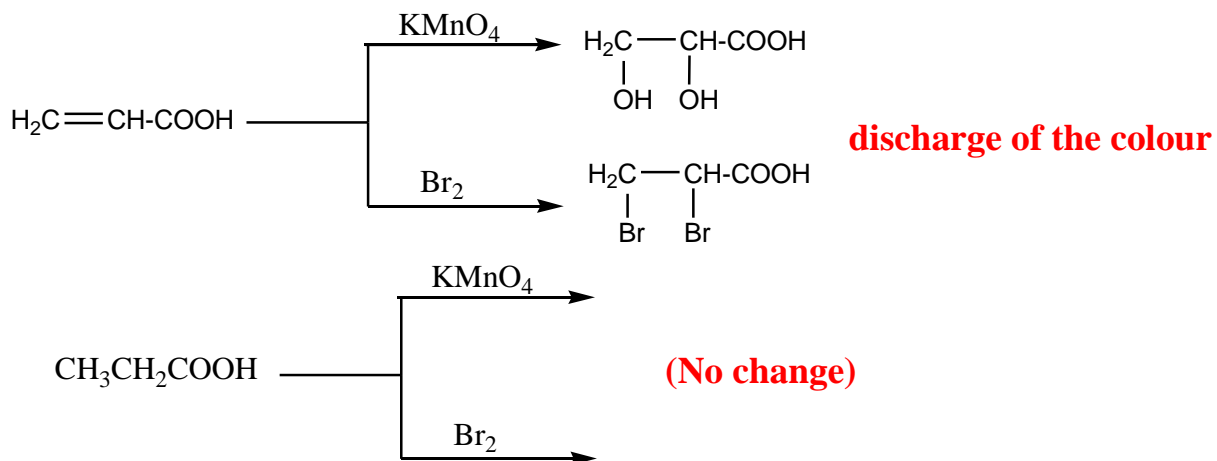
II- a) How you will separate a mixture of primary, secondary and tertiary amines. (4 Marks)



b) What is the product, when Acetone reacts with $\text{NH}_2\text{-OH}$, $\text{NH}_2\text{-NH}_2$ and $\text{NH}_2\text{-NH-C}_6\text{H}_5$. (4 Marks)



c) What happens when acrylic acid ($\text{CH}_2=\text{CH-COOH}$) and propanoic acid ($\text{CH}_3\text{CH}_2\text{COOH}$) are treated with dilute cold KMnO_4 or bromine in the presence of red phosphorus. (4 Marks)



III- Choose the correct answer: (24*1 = 24 marks)

Question No	Answer
1	b
2	d
3	b
4	a
5	b
6	c
7	a
8	c
9	d
10	a
11	d
12	a
13	d
14	b
15	d
16	d

17	d
18	b
19	a
20	a
21	d
22	b
23	b
24	d