Name (First, MI, Last):
Student ID Number:
Circle the name of your TA: AL CARI ROB
Discussion Section – Day: Time:

Q	X
1	
2	
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12	
13	
14	
15	

Chem 30B Fall 2003

QUIZ #3

(15 Min)

Monday December 1st

INTERPRETATION OF THE QUESTIONS IS PART OF THE EXAM – DO NOT ASK FOR THE QUESTIONS TO BE EXPLAINED TO YOU

USE CAPITAL LETTERS WHEN FILLING IN THE BOXES AND BE CLEAR – IF WE CAN'T FIGURE OUT WHAT A LETTER IS, IT WILL AUTOMATICALLY BE GRADED AS INCORRECT

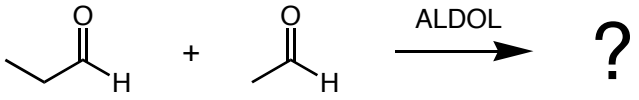
****DO NOT OPEN THIS EXAM UNTIL INSTRUCTED TO DO SO****

TOTAL = / 28

"Many that live deserve death. And some die that deserve life. Can you give it to them? Then be not too eager to deal out death in the name of justice, fearing for your own safety. Even the wise cannot see all ends." – *JRR Tolkien*

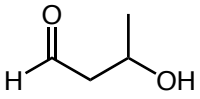
Questions 1–15 are worth 2 points each:

1.



Which of the five compounds shown below cannot be formed in the crossed ALDOL reaction between the two aldehydes shown above?

A



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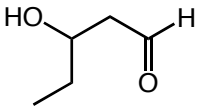

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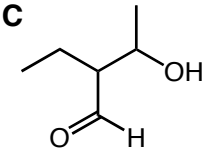

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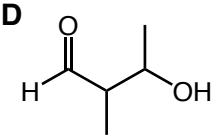

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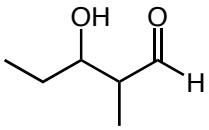
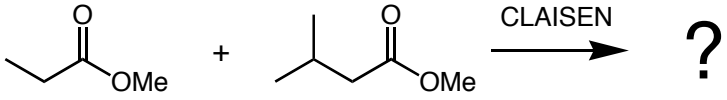
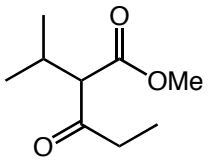


2.



Which of the five compounds shown below cannot be formed in the crossed CLAISEN reaction between the two methyl esters shown above?

A



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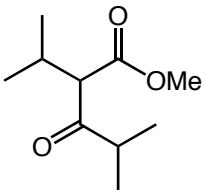

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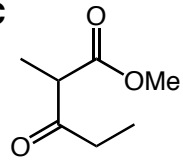

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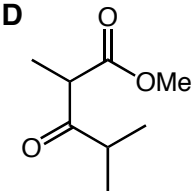

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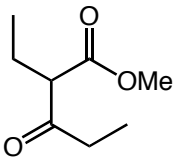

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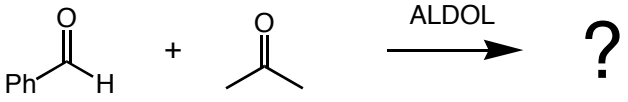
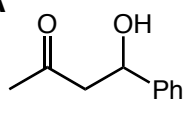


The major product of the reaction shown above is:

A



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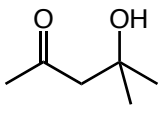

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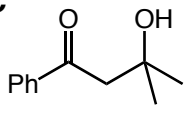

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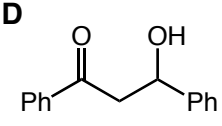

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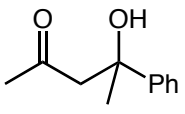

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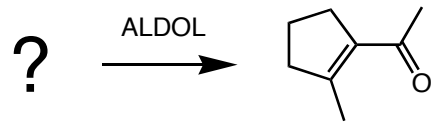
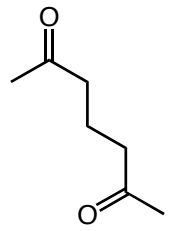


The starting material necessary for this transformation is:

A


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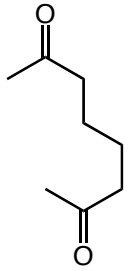

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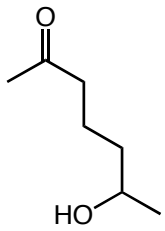

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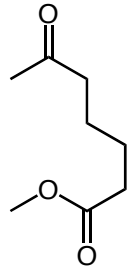

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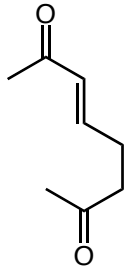

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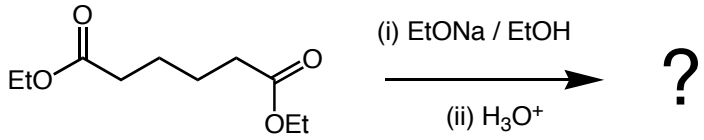
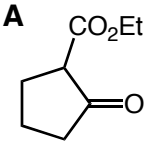


The product of the Dieckmann condensation shown above is:

A


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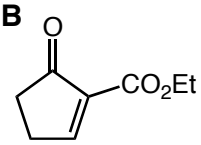

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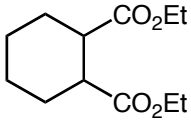

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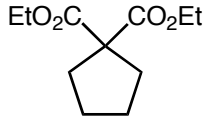

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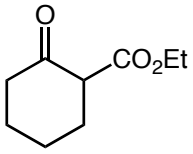

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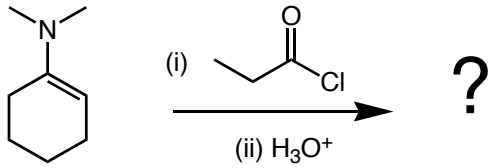
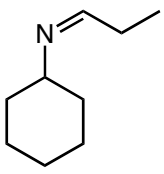


The reaction shown above gives which product:

A


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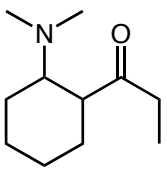

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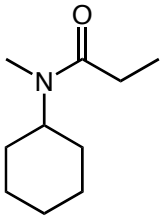

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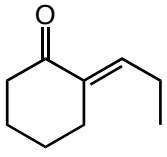

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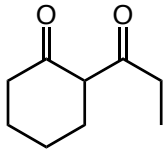

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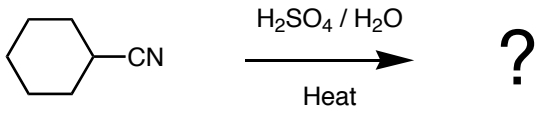
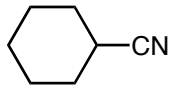
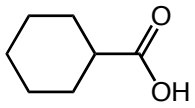
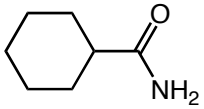
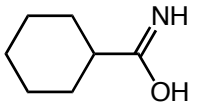


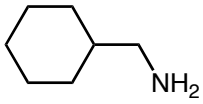
The reaction shown above gives which product:

A 

B 

C 

D 

E 

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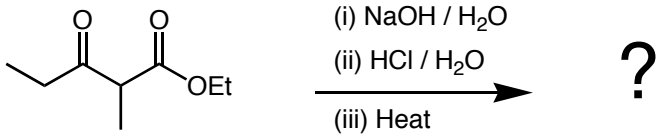
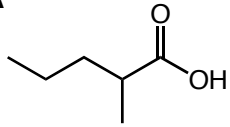
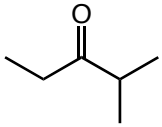
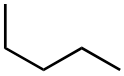
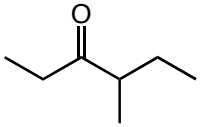


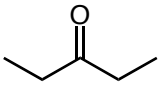
The reaction sequence shown above gives which product:

A 

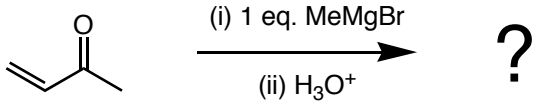
B 

C 

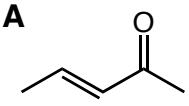
D 

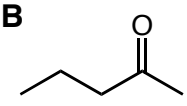
E 

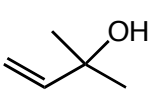
9.

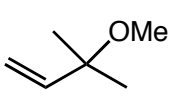


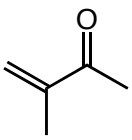
The reaction shown above gives which product:

A 

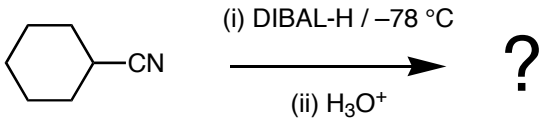
B 

C 

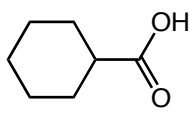
D 

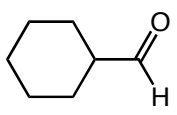
E 

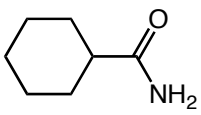
10.

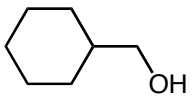


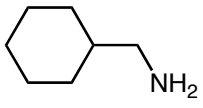
The reaction shown above gives which product:

A 

B 

C 

D 

E 

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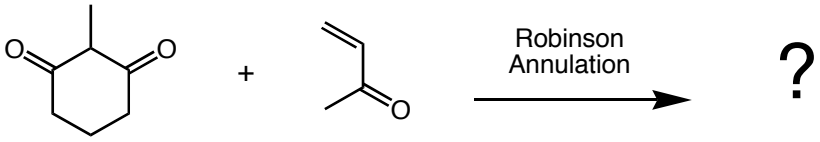
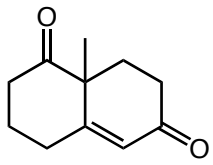
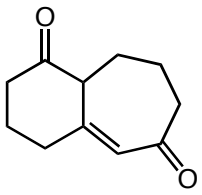
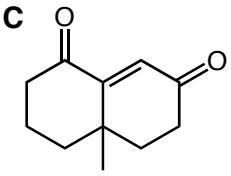
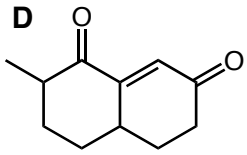


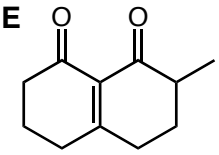
The reaction shown above gives which product:

A 

B 

C 

D 

E 

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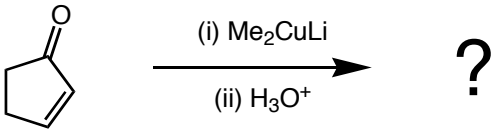
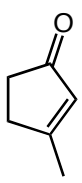
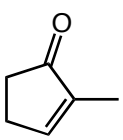
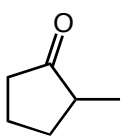
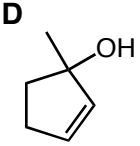


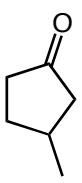
The reaction shown above gives which product:

A 

B 

C 

D 

E 

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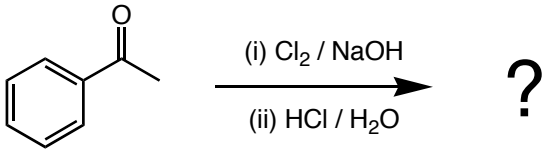
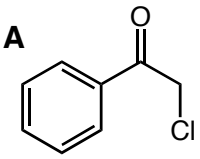


The reaction shown above gives which product:

A


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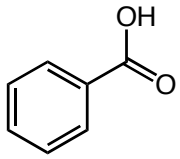

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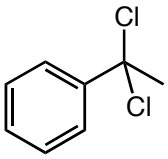

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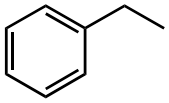

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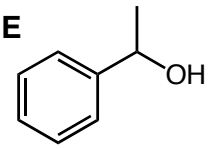

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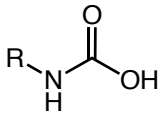

The compound shown above is an intermediate in the Hofmann Rearrangement, and is called:

A A Carbamic Acid **B** An Isocyanate **C** A Urea **D** An Amide **E** An Nitrene

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15. The product of the Beckmann Rearrangement is a:

A A Urea **B** A Lactone **C** A Lactam **D** An Amine **E** An Oxime