Quiz 2a.

Name (print):
Name (sign):

Recitation Instructor:
The following quiz will begin 5 minutes into the start of recitation and will last 30 minutes. Good luck.

(1) Show the reactants, reagents, or products of the following reactions. (10 points. 2.5 points each)

(a) \[ \text{O} \quad \text{H}_2\text{SO}_4, \text{H}_2\text{COH} \quad \text{cyclic compound} \]

(b) \[ \text{H}_3\text{C} \quad \text{H}_3\text{C}-\text{PPh}_3 \quad \text{H}_3\text{C}-\text{CH}_3 \]

(c) \[ \text{NaBH}_4 \rightarrow \text{OH} \]

(d) \[ \text{Cl} \quad \text{OH} \rightarrow \text{cyclic compound} \]

2. Complete the following synthesis, and make sure to show all your intermediates. They can be done in 3 steps, but you can use as many steps as you like (10 points, 5 points each)

(a) \[ \text{phenylacetaldehyde} \rightarrow \text{aryl alcohol} \]

(b) \[ \text{cyclohexane} \rightarrow \text{cyclohexene dimethyl ether} \]
Quiz 2b.

Name (print):

Name (sign):

Recitation Instructor:

The following quiz will begin 5 minutes into the start of recitation and will last 30 minutes. Good luck.

(1) Show the reactants, reagents, or products of the following reactions. (10 points, 2.5 points each)

(a) \( \text{H}_3\text{OMgBr} \rightarrow \)  
(b) \( \text{LiAlH}_4 \rightarrow \)  
(c) \( \text{H}_2\text{NNH}_2 \rightarrow \)  
(d) \( \rightarrow \)

2. Complete the following synthesis, and make sure to show all your intermediates. They can be done in 3 steps, but you can use as many steps as you like (10 points, 5 points each)

(a) \( \text{CH}_3 \)  
(b) \( \)  
(c) \( \text{CH}_3 \)
Quiz 2c.

Name (print):

Name (sign):

Recitation Instructor:

The following quiz will begin 5 minutes into the start of recitation and will last 30 minutes. Good luck.

1. Show the reactants, reagents, or products of the following reactions. (10 points. 2.5 points each)

(a) \( \text{Me} \quad \text{HNMe}_2, \quad \text{H}_2\text{SO}_4 \)  
(b) \( \text{MeMe} \quad \text{MeMgBr} \)

2. Complete the following synthesis, and make sure to show all your intermediates. They can be done in 3 steps, but you can use as many steps as you like (10 points, 5 points each)

(a) \( \text{Me} \quad \text{OH} \quad \text{Me} \)

(b) \( \text{OH} \quad \text{Me} \quad \text{OH} \)
Quiz 2d.
Name (print):
Name (sign):
Recitation Instructor:

The following quiz will begin 5 minutes into the start of recitation and will last 30 minutes. Good luck.

(1) Show the reactants, reagents, or products of the following reactions. (10 points. 2.5 points each)

(a) \( \text{Me} \) \( \text{LiAlH}_4 \)

(b) \( \text{Me}_{2} \) \( \text{OMe} \) \( \text{DIBAL-H} \)

(c) \( \text{Me}_{2} \) \( \text{OMe} \)

(d) \( \text{Me}_{2} \) \( \text{OMe} \)

2. Complete the following synthesis, and make sure to show all your intermediates. They can be done in 3 steps, but you can use as many steps as you like (10 points, 5 points each)

(a) \( \text{Me} \) \( \text{OH} \)

(b) \( \text{Me} \) \( \text{OH} \)

(\) \( \text{Me} \) \( \text{OMe} \)
Quiz 2a.

Name (print):
Name (sign):
Recitation Instructor:

The following quiz will begin 5 minutes into the start of recitation and will last 30 minutes. Good luck.

(1) Show the reactants, reagents, or products of the following reactions. (10 points, 2.5 points each)

(a) \[ \text{C}_{6}\text{H}_{10} \xrightarrow{\text{H}_2\text{SO}_4, \text{H}_3\text{COH}} \text{C}_{6}\text{H}_{12}\text{O}_2\text{CH}_3 \]

(b) \[ \text{CH}_3\text{C}=\text{CCH}_3 \xrightarrow{\text{H}_2\text{C}-\text{PPh}_3} \text{C}_2\text{H}_4 \]

(c) \[ \text{C}_3\text{H}_7\text{OH} \xrightarrow{\text{NaBH}_4} \text{C}_3\text{H}_7\text{O} \]

(d) \[ \text{CH}_3\text{COCH}_3 \xrightarrow{\text{NaBH}_4} \]

2. Complete the following synthesis, and make sure to show all your intermediates. They can be done in 3 steps, but you can use as many steps as you like (10 points, 5 points each)

(a) \[ \text{PhCOCH}_3 \xrightarrow{\text{MeOH}} \text{PhCOCH}_3 \xrightarrow{\text{PCC}} \]

(b) \[ \text{C}_8\text{H}_{16} \xrightarrow{\text{BH}_3, \text{NaOH}} \text{C}_8\text{H}_{16} \xrightarrow{\text{H}_2\text{SO}_4} \xrightarrow{\text{PCC}} \]
Recitation Instructor:

The following quiz will begin 5 minutes into the start of recitation and will last 30 minutes. Good luck.

1. Show the reactants, reagents, or products of the following reactions. (10 points, 2.5 points each)

   (a) \[ \text{H}_2\text{CMgBr} \rightarrow \text{CH}_3\text{MgBr} \]
   (c) \[ \text{H}_2\text{NNH}_2 \rightarrow \text{NH}_2\text{NH}_2 \]

   (b) \[ \text{LiAlH}_4 \rightarrow \text{OH} \]
   (d) \[ \text{OCPBA} \rightarrow \text{SO}_3\text{H} \]

2. Complete the following synthesis, and make sure to show all your intermediates. They can be done in 3 steps, but you can use as many steps as you like (10 points, 5 points each)

   (a)
   \[ \begin{array}{c}
   \text{CH}_3 \\
   \text{NaBH}_4
   \end{array} \rightarrow \text{H}_2\text{O, }\text{H}_2\text{SO}_4 \]
   \[ \begin{array}{c}
   \text{OH} \\
   \Delta
   \end{array} \rightarrow \text{CH}_3 \]

   (b)
   \[ \begin{array}{c}
   \text{BH}_3\text{Cl} \rightarrow \text{H}_2\text{O, }\text{H}_2\text{SO}_4
   \end{array} \]
   \[ \begin{array}{c}
   \text{PCC}
   \end{array} \]
   \[ \begin{array}{c}
   \text{MeMgBr}
   \end{array} \]
Quiz 2c.  

1. Show the reactants, reagents, or products of the following reactions. (10 points, 2.5 points each)

(a) 

(b) 

2. Complete the following synthesis, and make sure to show all your intermediates. They can be done in 3 steps, but you can use as many steps as you like (10 points, 5 points each)

(a) 

(b) 

---

Recitation Instructor:

The following quiz will begin 5 minutes into the start of recitation and will last 30 minutes. Good luck.
The following quiz will begin 5 minutes into the start of recitation and will last 30 minutes. Good luck.

(1) Show the reactants, reagents, or products of the following reactions. (10 points, 2.5 points each)

(a) \[ \text{MeO} \xrightarrow{\text{LiAIH}_4} \]

(b) \[ \text{O} \xrightarrow{\text{DIBAL-H}} \]

(c) \[ \xrightarrow{\text{MeMgBr}} \]

(d) \[ \xrightarrow{} \]

2. Complete the following synthesis, and make sure to show all your intermediates. They can be done in 3 steps, but you can use as many steps as you like (10 points, 5 points each)

(a) \[ \xrightarrow{} \]

(b) \[ \xrightarrow{} \]