

CHEM 8410_6410_4410 - Organic Synthesis

Quiz #2 of 5	10 PTS	Instructor: Room #:	Prof. Andreana FH 2030
Your Name:			
Student Number			

1) What is the product of the following reaction sequence? 3 PTS

ANSWER (Circle):

- A) B) C) D)
- 2) In a general reaction known as the cyclohexadienone-phenol rearrangement, cyclohexadienones are converted to phenols under conditions of acid catalysis. An example is:

Write a reasonable mechanism for this reaction. 3 PTS

ANSWER:

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3) Provide the missing reagents/structures for the "roadmap" below. ($\mathbf{A} = \text{reagent}$, $\mathbf{B} = \text{reagent}$, $\mathbf{C} = \text{reagent}$, $\mathbf{D} = \text{reagent}$). Reagent \mathbf{D} is a specific base covered in class (three letters will do). **4**

PTS

$$\begin{array}{c} \text{reagent, D = reagent, D is a specific base covered in class (three letters will do).} & \text{4} \\ \text{PTS} \\ \hline \\ \text{CI} & \frac{1) \text{ A}}{2) \text{ H}_2 \text{NNH}_2, EtOH} \\ \end{array}$$

$$\begin{array}{c} \text{NH}_2 & \frac{1) \text{ B}}{2} \\ \hline \\ \text{O} & \frac{1) \text{ OsO}_4}{2) \text{ C}} \\ \hline \\ \text{O} & \frac{1) \text{ OsO}_4}{2) \text{ C}} \\ \hline \\ \text{NH} \\ \hline \end{array}$$

ANSWER: