Third Midterm Exam
[Chapters 8-10 (Carey textbook)]

CHE201A-C
Professor Diver and Dr. Clizbe

Nov. 21, 2014
Fall 2014

Version B
(Exam duration: 1 h 30 min)

NAME: Key

circle one: Dr. Clizbe or Dr. Diver *and*: Section (A, B, C)

TA Name:_____ *or* CHE203

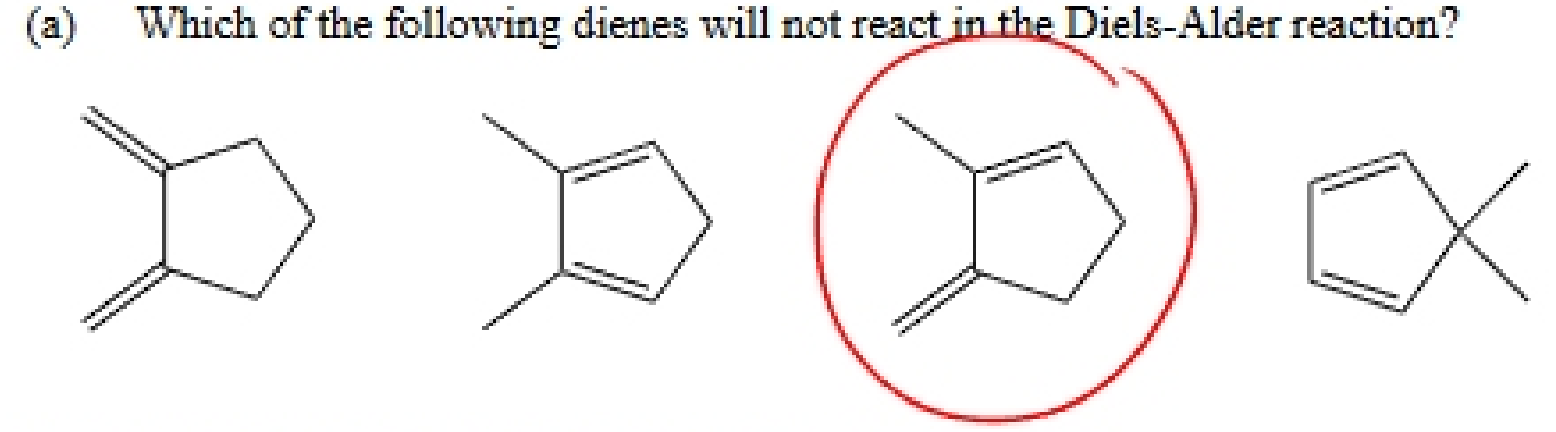
Page	Total Possible Points (Possible Points per page)	Points
2	25	
3	20	
4	15	
5	30	
6	30	
7	20	
8	15	
9	Periodic Table	

TOTAL POSSIBLE: 150 YOUR TOTAL:_____

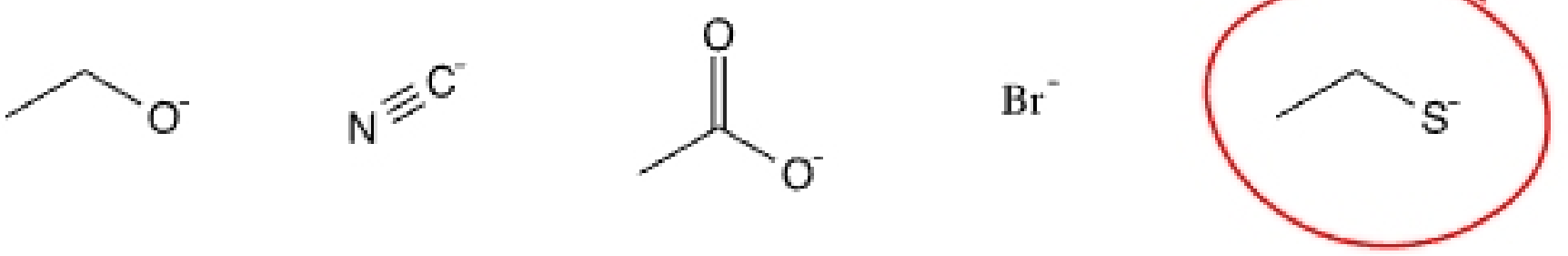
Molecular models are ALLOWED; calculators are NOT ALLOWED. No cell phones or extra paper will be provided. Fill out the exam in pen, use the back of the page if more room is needed.
CHECK THAT YOUR EXAM INCLUDES ALL 9 PAGES.

1. (30 pts) Circle the correct structure for each question. (5 points each).

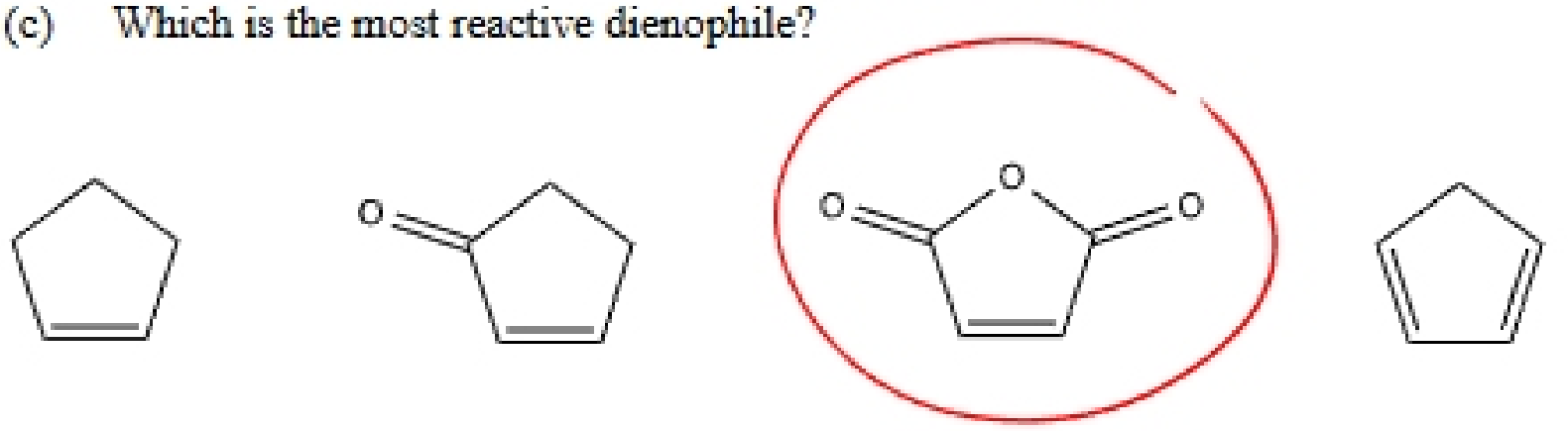
(a) Which of the following dienes will not react in the Diels-Alder reaction?



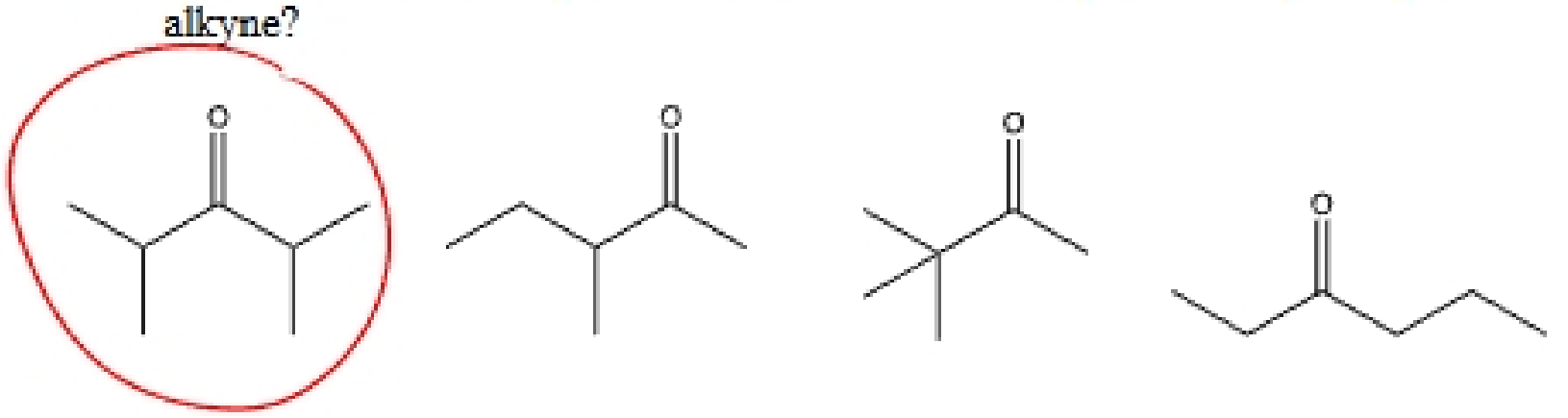
(b) Which of the following nucleophiles is the strongest?



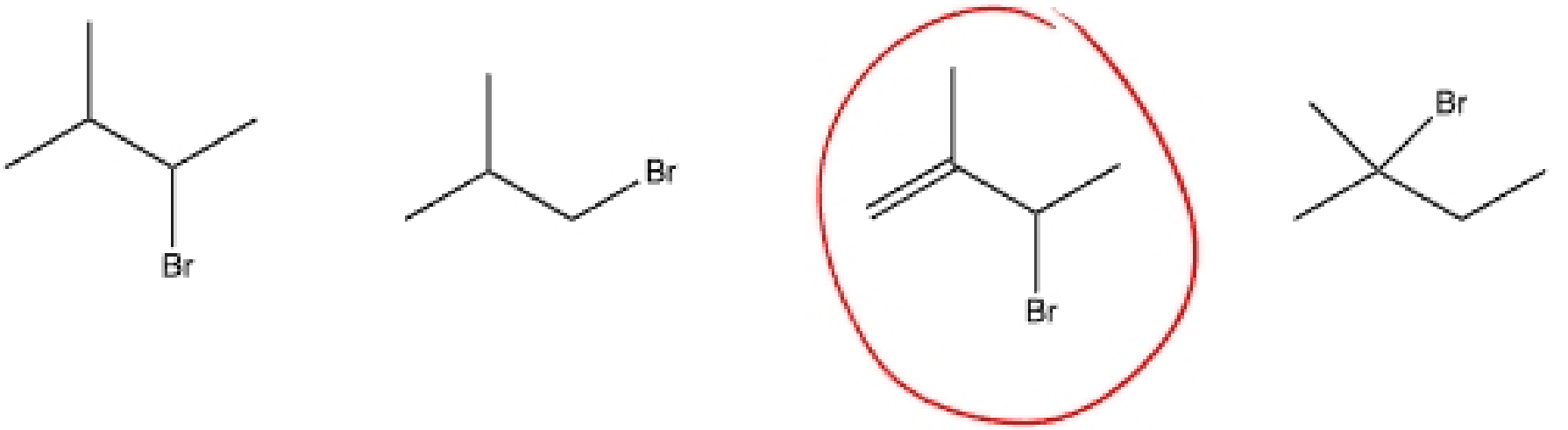
(c) Which is the most reactive dienophile?



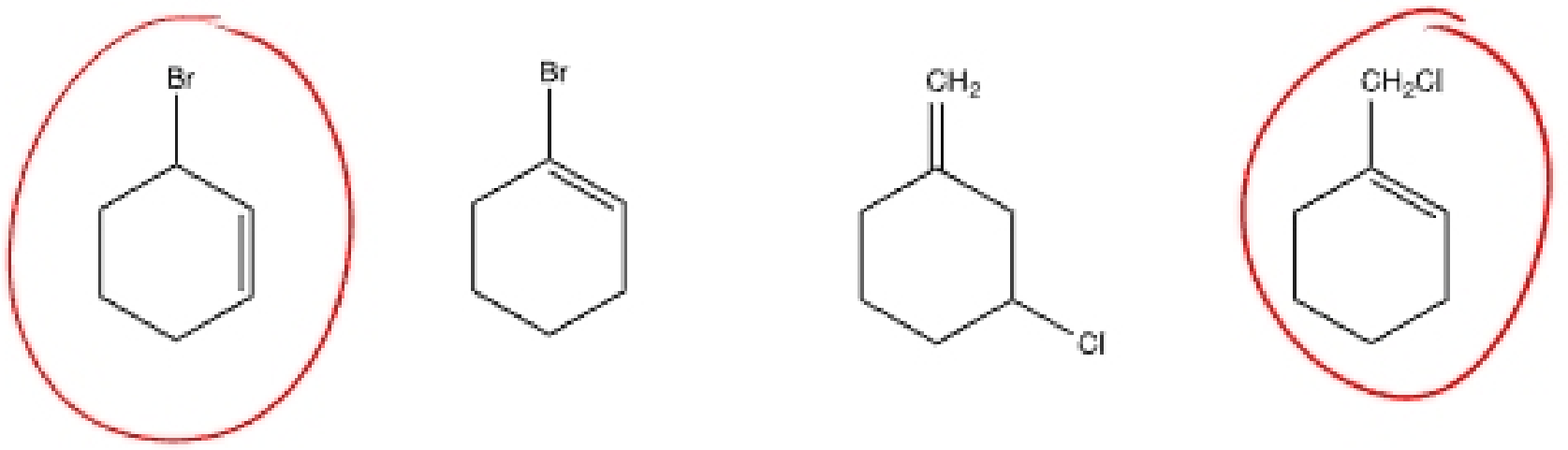
(d) Which of the following molecules cannot be made by acid-catalyzed hydration of an alkyne?



(e) Which of the following will have the fastest rate in an S_N2 reaction?



(f) Which of the following molecules represent an allylic halide? (circle all that apply)



2. In the following hydration of 1-butyne, intermediate **A** is initially formed, but was not isolated. Draw the final isolated product (product **B**) and provide a detailed mechanism showing each individual step going from intermediate **A** to product **B**. For full credit, use the arrow formalism to show electron movement (15 points).