QUESTION 1

Which describes the ALLOWED product of this reaction?

A  Hückel transition state, suprafacial/suprafacial reaction
B  Hückel transition state, suprafacial/antarafacial reaction
C  Möbius transition state, suprafacial/suprafacial reaction
D  Möbius transition state, suprafacial/antarafacial reaction

QUESTION 2

Which **correctly and completely** describes the product of the following Diels-Alder reaction?

A  ![Product A](image)
B  ![Product B](image)
C  ![Product C](image)
D  ![Product D](image)
QUESTION 3

MC30g

Give the product of the following reaction under THERMODYNAMIC control conditions (high temperature)

A

B

C

D

QUESTION 4

MC30h

Give the product of the following reaction under THERMODYNAMICALLY controlled conditions (high temperature)

A

B

C

D
QUESTION 5
MC40d
Which best describes the following reaction?

A Conrotatory  
B Disrotatory
C Neither Conrotatory or Disrotatory  
D Not Enough Information To Tell

QUESTION 6
MC30w
How many VERTICAL nodes do the *Highest Occupied and Lowest Unoccupied π-Molecular Orbitals of the anion formed upon deprotonation of the structure shown?*

A) HOMO = 0 and LUMO = 1  
B) HOMO = 1 and LUMO = 2  
C) HOMO = 2 and LUMO = 3  
D) HOMO = 3 and LUMO = 4
QUESTION 7

Which best describes the following reaction?

A suprafacial on the anion and suprafacial on the alkene
B suprafacial on the anion and antarafacial on the alkene
C antafacial on the anion and suprafacial on the alkene
D antarafacial on the anion and antarafacial on the alkene

QUESTION 8

Which answer describes the number of VERTICAL nodes for the HOMO and the LUMO of ozone?

A) HOMO = 0 and LUMO = 1
B) HOMO = 1 and LUMO = 2
C) HOMO = 2 and LUMO = 3
D) HOMO = 3 and LUMO = 4
QUESTION 9
There are NO INCORRECT answers to this question, ALL answers to this question will be considered correct for grading purposes
What overall final grade do you expect to earn in this class?
A  
B  
C  
D

QUESTION 10
There are NO INCORRECT answers to this question, ALL answers to this question will be considered correct for grading purposes
How hard did you work on organic chemistry this week (not including watching/attending lectures)
A  Very Hard  
B  Hard  
C  Somewhat Hard  
D  Not very Hard this week