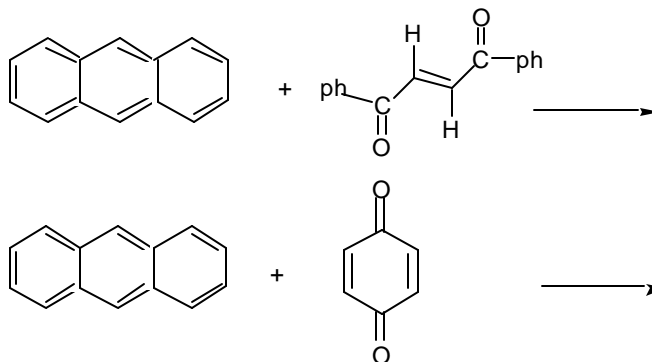


**F/C3545 & C3545** Fall 1999

## Postlab questions: Diels-Alder Reaction

1. (9 pts)

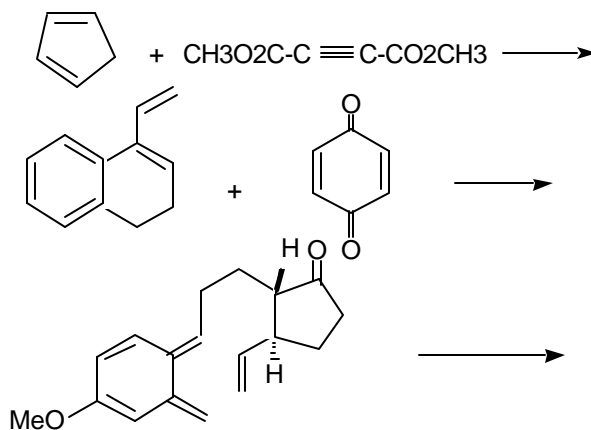
a). Predict the structure of the product of the reactions given below.



b) Offer an explanation of why anthracene preferentially forms a Diels-Alder adduct at the 9, 10 position. ( Consult advanced organic chem. by Jerry March page 43 )

c) There are four resonance structures for anthracene. Draw them.

2. Show arrows for electron movement in each of the Diels-Alder reactions below, and show the product. ( 9 Points)



3. What starting material will be necessary to prepare the following compound by Diels-Alder reaction? (2pts)

