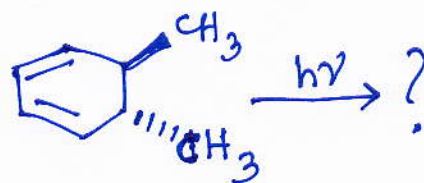
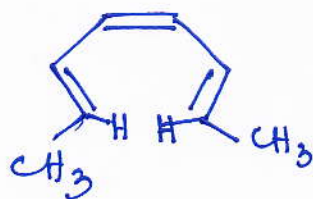
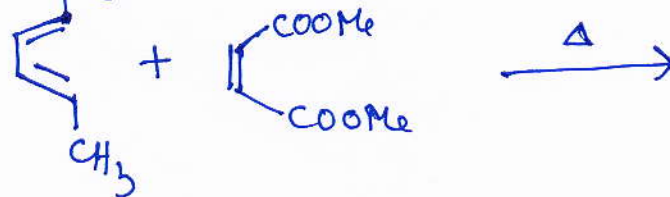
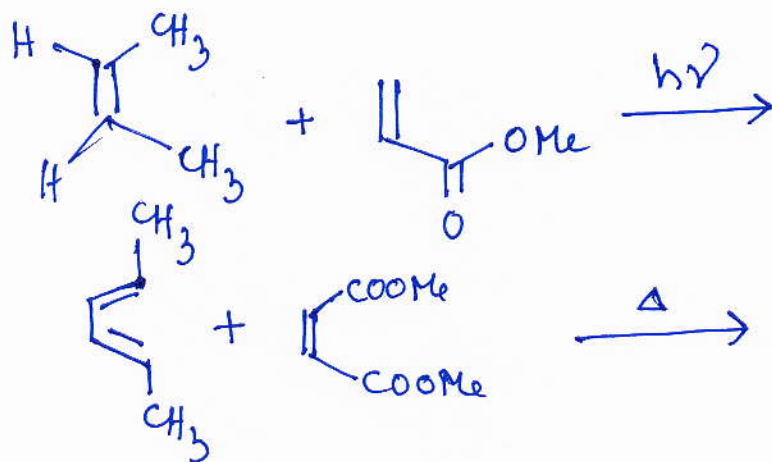


1. Predict the product in the following electrocyclic reactions and indicate the stereochemistry. Explain the outcome with the help of FMO or PMO theory.



2. Consider the following cycloaddition reactions! Classify them as per  $(m+n)$  reaction. Also indicate, using FMO/PMO theory, whether the processes go through supra-supra or supra-antara mode?



3. Draw the structure of the product in the following sigmatropic rxns:

