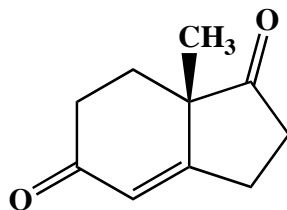


## Quiz #1

1. (10 points)

The following carbonyl compound is a solid with a melting-point range of 64–66° C. What type of solvent would one use (choices: water, a polar organic solvent, or a nonpolar organic solvent) to dissolve this compound? Describe in detail what must occur at the molecular level for the solute to dissolve. In particular, describe the specific intermolecular interactions that are broken and those that are formed.



2. (10 points)

Draw the specific reagent(s) necessary to effect the following transformation. If more than one reaction is involved, be certain to distinguish the individual steps clearly. Include stoichiometric coefficients of reagents, as well. If a reagent is not commercially available, show its preparation.

