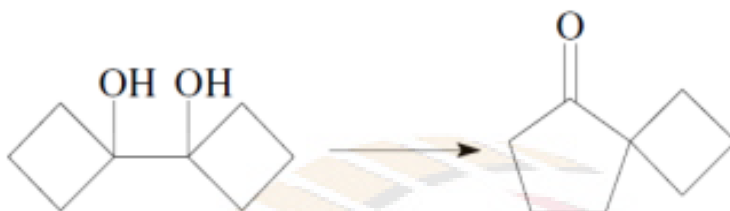


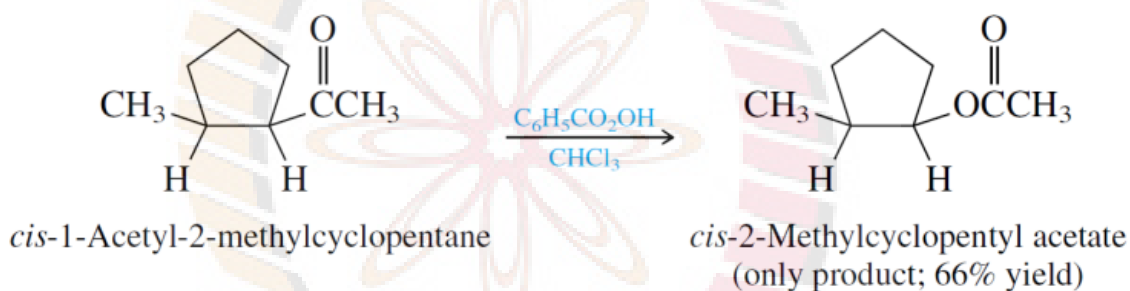
1. Propose a mechanism for the following transformation



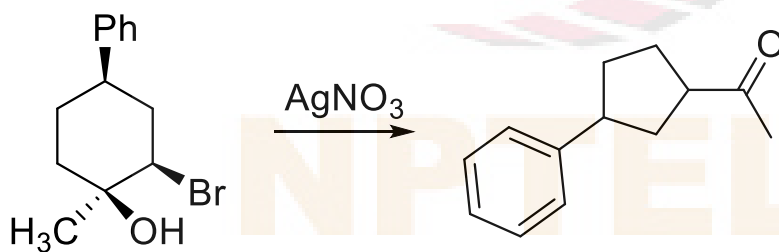
2. Write out a mechanism for the following transformation:



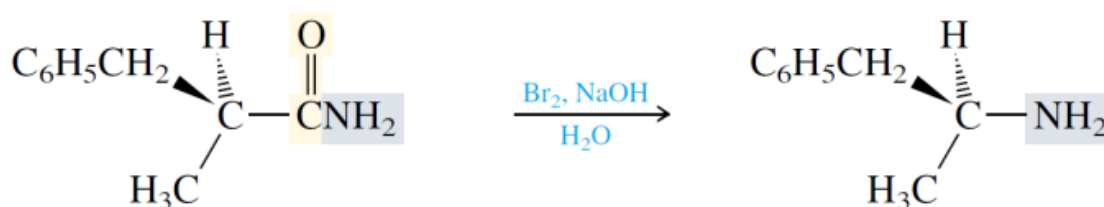
3. Propose a mechanism for the following reaction and comment on the stereochemistry.



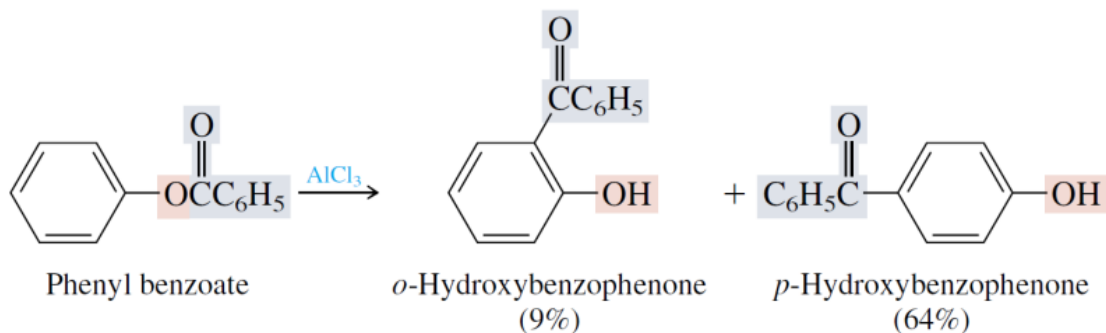
4. Consider the following reaction of the bromide with silver nitrate. The major product formed in this reaction is shown below. Draw out the structure in the chair conformation and reason out the outcome



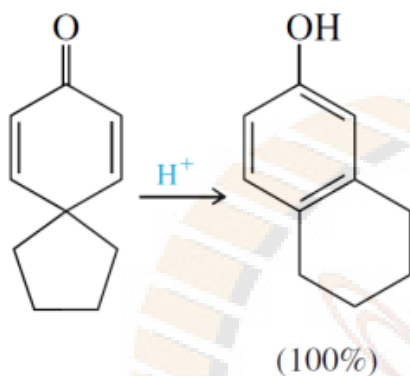
5. The following transformation occurs with retention in stereochemistry. What is your inference?



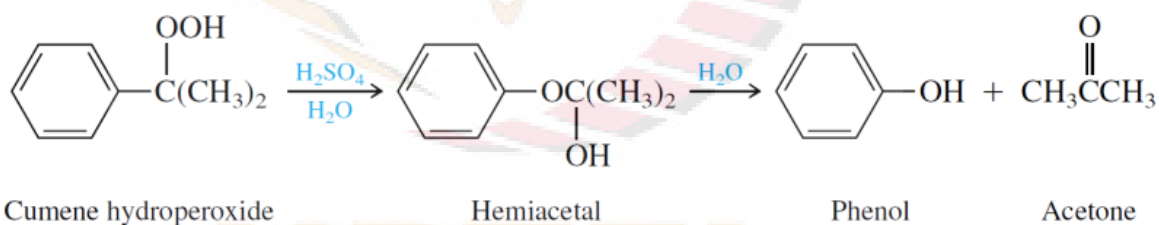
6. Write out a mechanism for the following transformation:



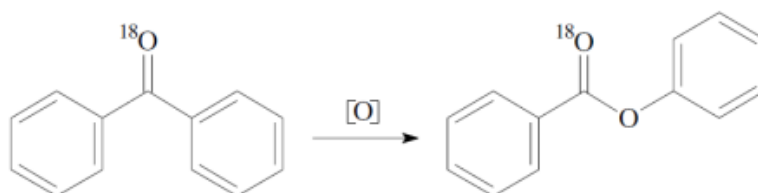
7. Write out an arrow-pushing mechanism for the following transformation



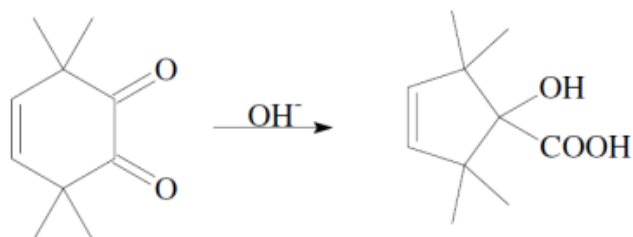
8. Consider the two-step transformation shown below and propose a reasonable mechanism:



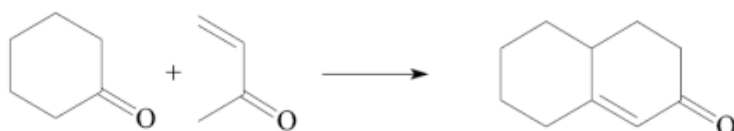
9. The following labelling experiment was carried out to understand the mechanism of oxidation by a peracid (Baeyer Villiger). What is your inference from this?



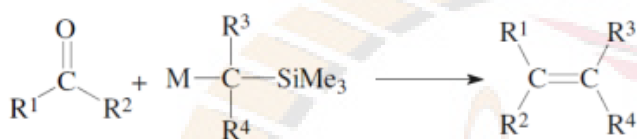
10. Write out a mechanism for the following transformation:



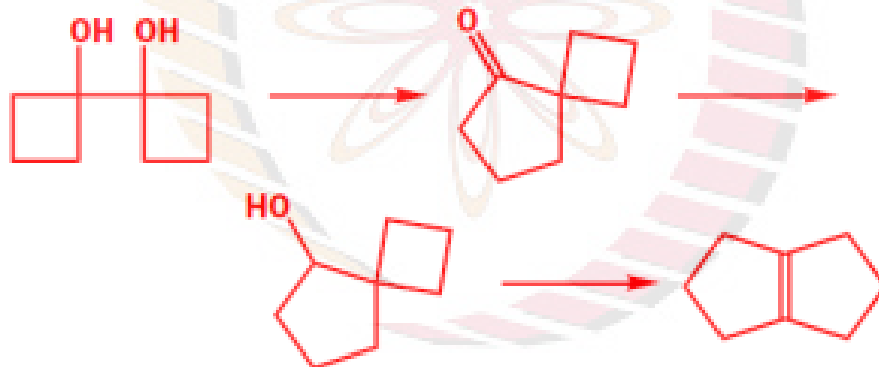
11. Write out intermediates for the following transformation:



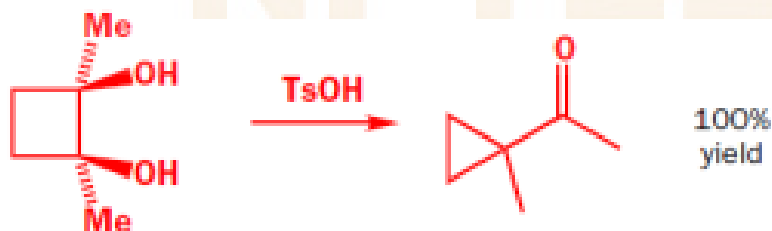
12. Write out a mechanism for the following transformation. M = Li or MgBr



13. Propose reagents for the following transformations:



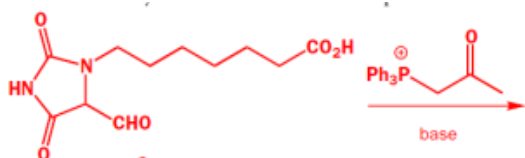
14. Propose mechanism for the following transformation



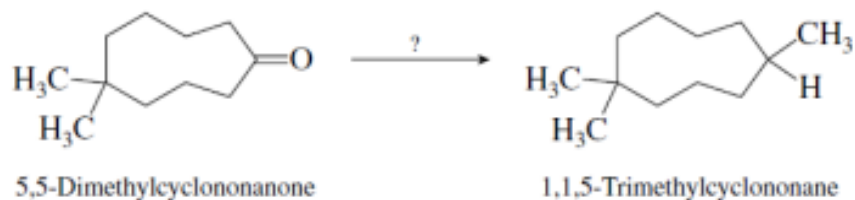
15. Propose a mechanism for the following transformation



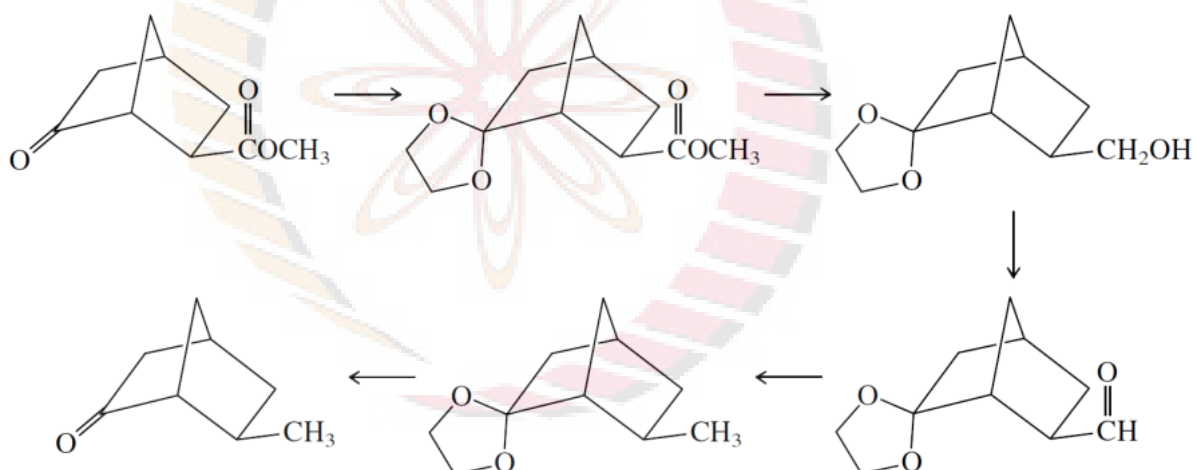
16. Identify the product of this reaction:



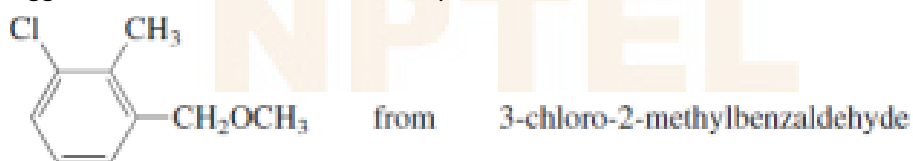
17. Propose reagents for the following transformations



18. Suggest reagents for the following transformations:



19. Suggest two distinct methods to carry out this transformation:



20. Identify the product that is formed

