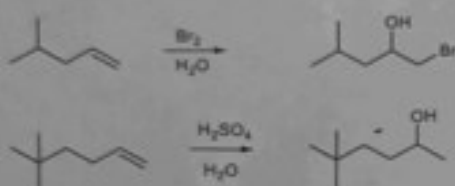


Examination questions KEM.340 "Organic Chemistry 2"

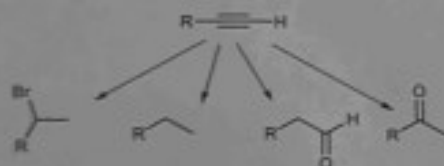
Examination date 18.10.2022, 1300-1600
 Examiner Alexander Efimov, University lecturer, ENS/MSEE, FC218
 Total pages: 2
 No additional materials are allowed on the exam

Each question is 10 pts max, 100 pts max in total

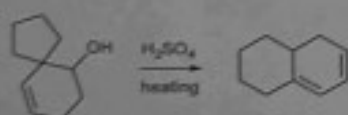
Q1. Propose mechanisms for the following reactions



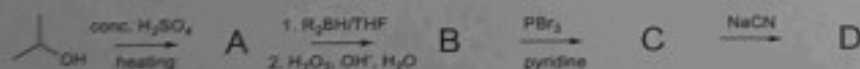
Q2. Which reagents are needed to carry the following syntheses?



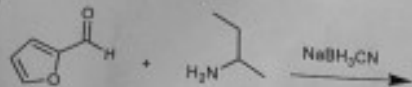
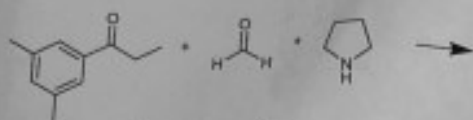
Q3. Propose a mechanism for the reaction



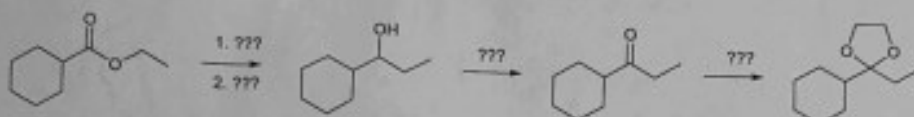
Q4. Draw the structures for the compounds A-D



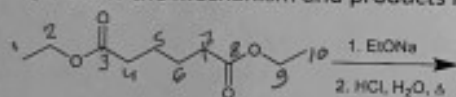
Q5. What products do you expect to obtain from each of the following reactions?



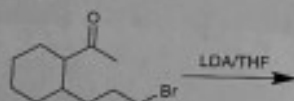
Q6. Mark the chemicals and reagents which you need to perform each step of the following synthesis



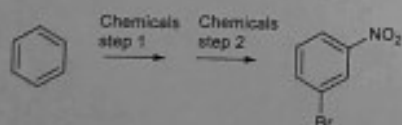
Q7. Draw the mechanism and products for the following condensation



Q8. Draw the product and mechanism if the following reaction is performed at a) -78°C ; b) 0°C



Q9. The following transformation is done in two steps. Propose the necessary chemicals and reagents for each step and explain why they should be applied in this order



Q10. Propose a method for the following synthesis. You can use any necessary chemicals, reagents and catalysts in an any number of steps

