## Name/

A. Predict the product of reaction when Ac<sub>2</sub>O reacts with geraniol.

B. "Nerol undergoes nine times faster for the cyclisation to  $\alpha$ -Terpineol on treatment with aqueous  $H_2SO_4$  than that of geraniol." Justify the statement.

C. Write the mechanism of the following reactions.

$$\begin{array}{c|c} & & \\ & &$$

- D. What conclusion can you derive about the structure of α-Terpineol from the following facts:
  - α-Terpineol does not give aldehyde or ketone on mild oxidation. It is not dissolved in dil. NaOH. It readily undergoes dehydration with H<sub>2</sub>SO<sub>4</sub>. It yields phenylurethane one reaction with phenylisothiocyanate.
  - The molecular fomula of  $\alpha$ -Terpineol is  $C_{10}H_{18}O$ .
- E. How will you synthesis terpenylic acid from myrcene.