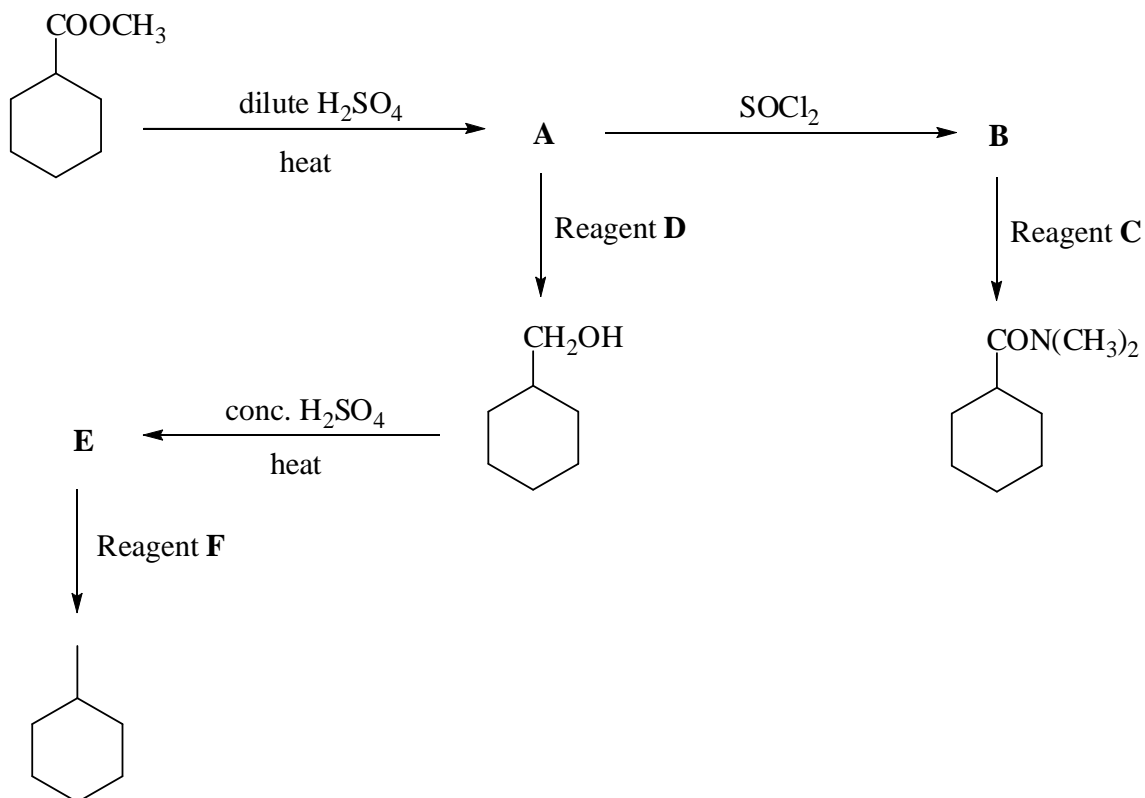
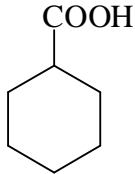
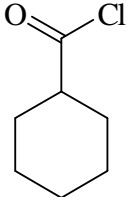
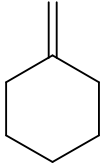


Marks
6

- Consider the following reaction sequence.



Give the reagents **C**, **D** and **F** and draw the structures of the major organic products, **A**, **B** and **E**, formed in these reactions.

<p>A</p>  <p>(Hydrolysis of an ester to a carboxylic acid).</p>	<p>D</p> <p>(1). LiAlH_4 / dry ether (2). H^+ / H_2O</p> <p>(Reduction of carboxylic acid to primary alcohol).</p>
<p>B</p>  <p>(Formation of an acid chloride from a carboxylic acid).</p>	<p>E</p>  <p>(Acid catalysed elimination of H-OH (“dehydration”) to form C=C).</p>

ANSWER CONTINUES ON THE NEXT PAGE

<p>C</p> $\begin{array}{c} \text{CH}_3 \\ \\ \text{H}-\text{N} \\ \\ \text{CH}_3 \end{array}$ <p>(Formation of amide from acid chloride).</p>	<p>F</p> <p>H₂ / Pd/C</p> <p>(Reduction of alkene to alkane).</p>
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