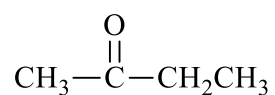
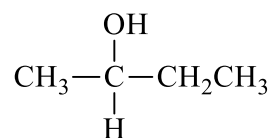


**Marks**  
**4**

- Butanone is treated first with lithium aluminium hydride,  $\text{LiAlH}_4$ , in dry ether and then with aqueous acid to yield the alcohol, **A**.



butanone

**A**

**A** is treated with concentrated sulfuric acid to give mainly the alkene **B** and two other alkenes **C** and **D**. Alkenes **B** and **C** are diastereomers, **B** and **D** (and **C** and **D**) are constitutional isomers. Give the structures for **C** and **D** and give systematic names for **B**, **C** and **D**.

<p><b>B</b></p> $\begin{array}{c} \text{H}_3\text{C} \quad \text{H} \\ \diagdown \quad / \\ \text{C}=\text{C} \\ / \quad \diagdown \\ \text{H} \quad \text{CH}_3 \end{array}$	<p><b>C</b></p>	<p><b>D</b></p>
<p>Name:</p>	<p>Name:</p>	<p>Name:</p>