Exercise 79 - Mechanistic Questions

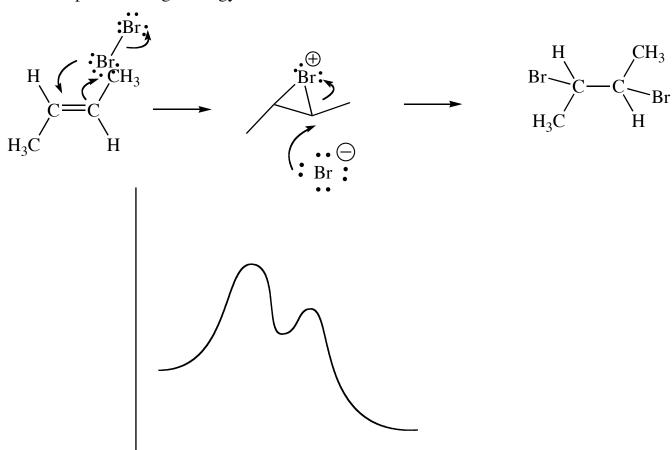
Question

Give a mechanism for the following reaction:

Question

- i) Give a mechanism for the following reaction.
- ii) Sketch a reaction profile diagram for this reaction.

Two steps with a high-energy intermediate. Product favoured.



Question

Give mechanisms for the formation of both products in the following reaction.

$$\begin{array}{c} CH_3 \\ H_3C-CH \\ CH_2 \\ \end{array} \begin{array}{c} CH_3 \\ H_3C-CH \\ CH_3 \\ \end{array} \begin{array}{c} CH_3 \\ H_3C-C \\ CH_3 \\ \end{array} \begin{array}{c} CH_3 \\ H_3C-C \\ \end{array} \begin{array}{c} CH_2 \\ \end{array} \begin{array}{c} 50/50 \text{ Mixture} \\ \end{array}$$

Question

Give a mechanism for the following processes and explain the regioselectivity.