Consider the following reaction between two amino acids.

- 1. Identify the amino acids.
- 2. On the structures of the starting amino acids, circle the nucleophile.
- 3. On the structures of the starting amino acids, square the electrophile.
- 4. On the structures of the starting amino acids, star the leaving group.
- 5. This reaction is unlikely to proceed. Give two reasons why:

a. The ammorium ion needs to be deprotonated to act as a nucleophile.

b. The ammonium ion armine nitrozens will be a better leaving group than the oxyanion even if it where protonated to a hydroxyl group.