## Ex 36 - pKa/reactant vs product

## **Question One**

a) Give the structure of the conjugate base and estimate the pK<sub>a</sub> of each of the following using your pKa table:

ii) H<sub>2</sub>O iii) H<sub>3</sub>C-CN i) NH<sub>3</sub>

b) Give the structure of the conjugate base and estimate the  $pK_a$  of each of the following:

i) (CH<sub>3</sub>CH<sub>2</sub>)<sub>2</sub>NH ii) CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>OH iii) CH<sub>3</sub>NH<sub>3</sub><sup>+</sup>

## **Question Two**

For each of the following molecules, identify the most acidic proton and estimate its pKa.







