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**Question 21** (3 marks)

A  $0.001 \text{ mol L}^{-1}$  solution of hydrochloric acid and a  $0.056 \text{ mol L}^{-1}$  solution of ethanoic acid both have a pH of 3.0.

**3**

Why do both solutions have the same pH?

Both solutions have the same pH level because ~~with~~  
~~ethanoic~~ the ethanoic acid is a <sup>weaker</sup> ~~stronger~~ type of acid  
than the hydrochloric acid. When there is a higher ~~ex~~  
concentration of ethanoic acid its pH level is  
raised to that of the hydrochloric acid.

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