Marks 7

- A sample of hydrofluoric acid (0.10 M, 25.0 mL) is titrated with 0.10 M NaOH. The pK_a of hydrofluoric acid, HF, is 3.17. Calculate the pH at the following four points.

before any NaOH is added

pH =

when half of the HF has been neutralised

pH =

at the equivalence point

pH =

after the addition of 37.5 mL of NaOH

pH =

THIS QUESTION CONTINUES ON THE NEXT PAGE.