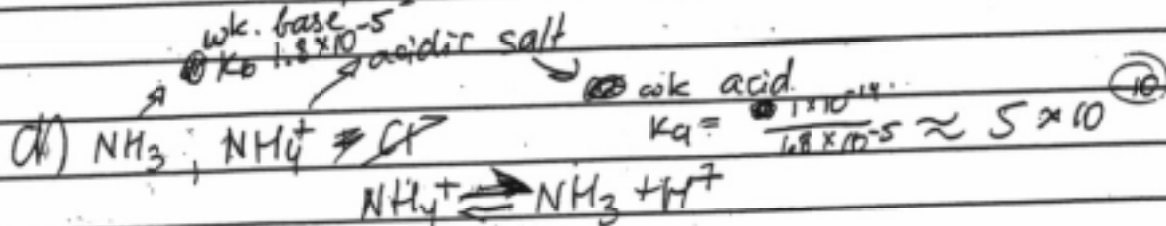


ADDITIONAL PAGE FOR ANSWERING QUESTION 8.

$$b) .03 \cancel{L} \times \frac{.1 \text{ mol}}{\cancel{L}} = .003 \text{ mol}$$

$$.003 \text{ mol} \times \frac{L}{.2 \text{ mol}} = \frac{3 \times 10^{-3} \text{ mol}}{2 \times 10^{-2} \text{ mol}} = 1.5 \times 10^{-2} = .15 \text{ L} = 15 \text{ ml}$$



Basic since NH_3 is a stronger base than NH_4^+ is an acid.

END OF EXAMINATION

THE FOLLOWING INSTRUCTIONS APPLY TO THE BACK COVER OF THE SECTION II BOOKLET.

- CIRCLE THE NUMBERS OF THE FREE-RESPONSE QUESTIONS YOU ANSWERED AS REQUESTED ON THE BOTTOM OF THE BACK PAGE.
- MAKE SURE YOU HAVE COMPLETED THE IDENTIFICATION INFORMATION AS REQUESTED ON THE BACK OF THE SECTION II BOOKLET.
- CHECK TO SEE THAT YOUR AP NUMBER APPEARS IN THE BOX(ES) ON THE BACK COVER.
- MAKE SURE YOU HAVE USED THE SAME SET OF AP NUMBER LABELS ON ALL AP EXAMINATIONS YOU HAVE TAKEN THIS YEAR.