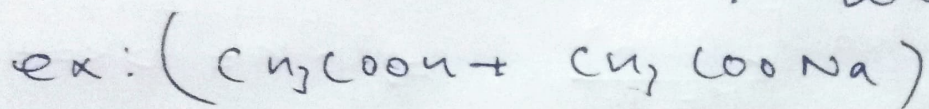
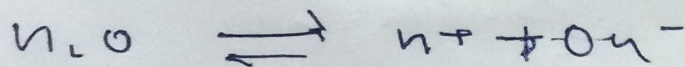
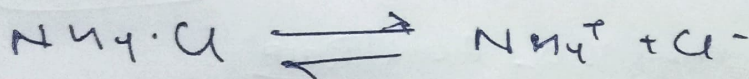
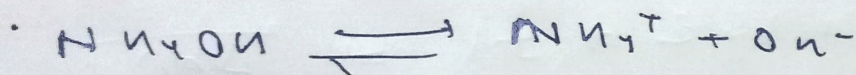
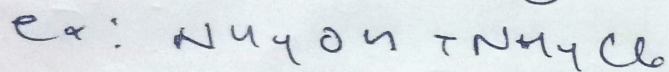


BUFFER SOLUTION

Acidic Buffer: Salt of weak with strong
Base + Weak Acid.

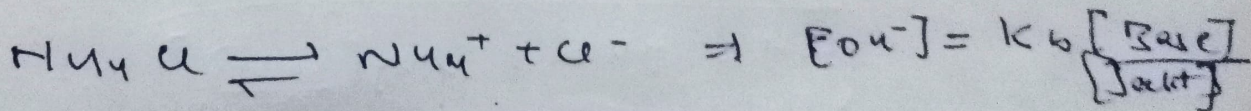


Basic Buffer: weak base + it's conj salt with
Strong Acid.



~~$K_b = \frac{[NH_4^+][OH^-]}{[NH_4OH]}$~~ $K_b = \frac{[NH_4^+][OH^-]}{[NH_4OH]}$

$[OH^-] = K_b \frac{[NH_4OH]}{[NH_4^+]}$



$\Rightarrow pOH = pK_b + \log \frac{[Salt]}{[Base]}$

$\Rightarrow \boxed{pH = 14 - pOH}$