

EQUILIBRIUM

$$\{1\}.. \quad w = \quad ,cpz_t.$$

K

$$(3). \quad [A'']^{1r} [Err$$

$$\{4. AG^\circ \quad \text{---} 2353 \text{ ET lag K}$$

$$\{5\}, \quad ^0_1 = \frac{A^- i[H_2O^{+1}]}{[HA1]}$$

$$K_o = \frac{[Er] \frac{01}{1150.1.fl} + 1}{1}$$

$$\{M. K_w = \quad 1[01-1' -10^{-16} \text{ all } 25^\circ\text{C}$$

$$\text{VI PH} \quad \text{---} 109 [N',$$

$$\{8\}. \quad pIc = pH + 1301^{-1} - 14 \text{ a } 25^\circ\text{C}$$

$$K_c \quad iIPTV''$$

f10). Hydrolysis of salts

{IM} For a salt of Strong acid and weak base

$$pH = \frac{1}{2} [PK_a \quad - \log EI$$

{II} for a salt of weak acid and strong base

$$p_{pH} = \frac{1}{2} [pIc, +pK_a, - 109 c]$$

{10} For salts of weak acid and weak base

$$phi = \quad -1314,0$$

$$\{11\}. \text{Equilibrium constant}_i = \frac{I}{K_b}$$

$$\{12\}. K_a \text{ OF } 11,0 =$$

$$(13). \text{Concentration quotient} = \frac{[cfriN^d]}{EArlar}$$