

MUSTAQIL ISHLASH UCHUN MASALALAR

1. 0.050 M CH_3COOH eritmasining pH qiymatini aniq hisoblang. $K_a = 1.8 \cdot 10^{-5}$. Soddashtirish ($x \leq C$) qo'llanilmaydi — kvadrat tenglama ishlatilsin.
2. 0.10 M NH_3 va 0.20 M NH_4Cl dan tashkil topgan tampon eritmaning pH qiymatini toping. $K_b = 1.8 \cdot 10^{-5}$.
3. 40 ml 0.10 M CH_3COOH eritmasiga 10 ml 0.10 M $NaOH$ qo'shildi. Natijaviy eritmaning pH ni toping. $K_a = 1.8 \cdot 10^{-5}$.
4. 0.20 M natriy atsetat (CH_3COONa) eritmasining pH qiymatini hisoblang. $K_a(CH_3COOH) = 1.8 \cdot 10^{-5}$.
5. 50 ml 0.10 M HCl eritmasi 50 ml 0.20 M NH_3 eritmasi bilan aralashtirildi. Oxirgi pH ni toping. $K_b(NH_3) = 1.8 \cdot 10^{-5}$.
6. 0.10 M NH_4Cl eritmasi 2 baravar suyultirildi. pH qanday o'zgaradi? $K_b = 1.8 \cdot 10^{-5}$.
7. 25°C da CH_3COOH eritmasida $(H^+) = 2.0 \cdot 10^{-4}$ M bo'lsa, eritmaning K_a qiymatini toping. Boshlang'ich konsentratsiya 0.050 M.
8. CH_3COOH (0.10 M) va CH_3COONa (0.40 M) dan tashkil topgan tampon eritmasiga 0.001 mol HCl qo'shildi (hajm o'zgarishi hisobga olinadi). Yangi pH ni toping.
9. 0.20 M NH_3 eritmasiga shuncha hajmda 0.10 M HCl qo'shiladiki, natijada $pH = 9.00$ bo'ladi. HCl hajmini toping. $K_b = 1.8 \cdot 10^{-5}$.
10. 0.050 M CH_3COOH eritmasining 20% i dissotsiatsiyalangan. Eritmaning K_a qiymatini toping (to'liq formuladan foydalaning).