**Test work № 1**

1. Calculate the pH of buffer system which consists of 200 ml of dilute acetic acid, C = 0,2 mol/l and 300 ml of sodium acetate C = 0,1 mol/l, Kd (acid) = 1,75·10-5.

2. Calculate the volume of sodium acetate C = 0,1 mol/l and the amount of acetic acid with C = 0,1 mol/l which must be mixed to prepare 5 l of acetate buffer рH = 5,24 (Кd (acid) = =1,75·10-5).

**Test work № 2**

1. Calculate the pH of buffer system which consists of 100 ml of dilute acetic acid, C = 0,2 mol/l and 400 ml of sodium acetate C = 0,5 mol/l, Kd (acid) = 1,75·10-5.

2. Calculate the volume of sodium acetate C = 0,1 mol/l and the amount of acetic acid with C = 0,1 mol/l which must be mixed to prepare 2 l of acetate buffer рH = 5,24 (Кd (acid) = =1,75·10-5).

**Test work № 3**

1. Calculate the pH of buffer system which consists of 200 ml of dilute acetic acid, C = 0,5 mol/l and 300 ml of sodium acetate C = 0,7 mol/l, Kd (acid) = 1,75·10-5.

2. Calculate the volume of sodium acetate C = 0,2 mol/l and the amount of acetic acid with C = 0,2 mol/l which must be mixed to prepare 1 l of acetate buffer рH = 5,24 (Кd (acid) = =1,75·10-5).

**Test work № 4**

1. Calculate the pH of buffer system which consists of 200 ml of dilute acetic acid, C = 0,1 mol/l and 400 ml of sodium acetate C = 0,2 mol/l, Kd (acid) = 1,75·10-5.

2. Calculate the volume of sodium acetate C = 0,5 mol/l and the amount of acetic acid with C = 0,1 mol/l which must be mixed to prepare 2 l of acetate buffer рH = 5,24 (Кd (acid) = =1,75·10-5).