## TEST TASKS

**1. Specify the conditions under which the chemical process is fundamentally feasible at temperature *T* and pressure *P*, if $\Delta G^{\circ}_{298}=\Sigma \nu_i (\Delta G^{\circ}_{298})_{formation\cdot i}$:**

A) $\Delta G_{T,P} < 1;$
B) at $\Delta G_{T,P} > 0;$
C) for $\Delta G_{T,P} = 1;$
D) $0 > G_{T,P} < 1$;
E) for $\Delta G_{T,P} < 0$.

**2. The reaction system is in thermodynamic equilibrium if the Gibbs energy change is:**

A) $\Delta G_{T,P} < 0;$
B) $\Delta G_{T,P} < 0;$
C) $\Delta G_{T,P} = 0;$
D) $0 > \Delta G_{T,P} < 1;$
E) $\Delta G_{T,P} < 1.$

**3. The reaction equation: $\nu_A A + \nu_B B + ... = \nu_R R + \nu_s S + ... + Q_p$, - represents:**

A) the equation of the exothermic reaction;
B) the equation of the endothermic reaction;
B) the stoichiometric reaction equation;
D) chemical reaction equation;
D) non-stoichiometric reaction equation.

**4. The thermal effect of the chemical process qp depends on the amount of the converted substance $\Delta N$. According to the thermochemical equation of a chemical reaction: $\nu_A A + \nu_B B + ... = \nu_R R + \nu_s S + ... + Q_p$, the thermal effect corresponds to the formula:**

A) $q_p = \Delta N_A / Q_p;$
B) $q_p = Q_p \Delta N_A;$
C) $q_p = Q_p \Delta N_R \Delta N_A;$