C) $Ca(NO_3)_2+2HCI \rightarrow CaCI_2+2HNO_3$; НЦНЦ

D) $NH_4NO_3 \rightarrow NH_3+HNO_3$;

E) $2NaNO_3+H_2SO_4 \rightarrow Na_2SO_4+2HNO_3$.

57. Stage of production of diluted nitric acid:

A) decomposition of ammonia in the presence of a catalyst;
B) hydration of nitric oxide;
C) absorption of nitrogen dioxide by water;
D) oxidation of nitric oxide to nitric pentoxide;
E) decomposition of ammonia to nitrogen and hydrogen.

58. The oxidation reaction of ammonia with oxygen in the presence of a catalyst is described by the equation:

A) $4NH_3+8O_2=2N_2O_5+6H_2O$;

B) $2NH_3+O_2=2NO+3H_2$;

C) $4NH_3+O_2=2N_2O+6H_2$;

D) $2NH_3+3O_2=N_2+3H_2O_2$;

E) $4NH_3+4O_2=2N_2O+6H_2O$.

59. In the production of nitric acid, the catalytic stage is the reaction:

A) $4NH_3+3O_2 \rightarrow 2N_2+6H_2O$;

B) $NO+0.5O_2 \leftrightarrow NO_2$

C) $3NO_2+H_2O \rightarrow 2HNO_3+NO$

D) $4NH_3+4O_2 \rightarrow 2N_2O+6H_2O$;

E) $4NH_3+5O_2 \rightarrow 4NO+6H_2O$.

60. The concentration of nitric acid by conventional distillation is impossible due to:

A) its low concentration in the azeotropic mixture;
B) the need for high energy costs;
C) explosion and fire hazard of the azeotropic mixture;
D) loss of acid activity during distillation;
E) the impossibility of azeotrope separation.

2.3. TECHNOLOGY OF SALTS AND FERTILIZERS