A) firing of secondary raw materials → production of SO_2 → purification and drying of gas → absorption of SO_2 → evaporation and concentration of sulfuric acid;

B) production of SO_2 → gas drying → oxidation of SO_2 to SO_3 → absorption of SO_3 → evaporation and concentration of sulfuric acid;

C) firing of raw materials → production of SO_2 → purification and drying of sulfur dioxide → absorption of SO_2 to sulfur dioxide;

D) production of SO_2 → purification of gas from impurities → oxidation of SO_2 to SO_3 (on the catalyst) → absorption of SO_3;

E) firing of mineral raw materials → production of SO_2 → oxidation of SO_2 to SO_3 → absorption of SO_3 → evaporation and concentration → cooling of the product.

39. The main components of sulphurous gas of the pyrite firing process are:

A) H_2, SO_2, N_2, O_2, HCl, SiF_4, NO;

B) SO_3, N_2, NO_2, NO, N_2O_4, HCl, H_2O;

C) SO_2, As_2O_3, SO_3, HF, SiF_4, SeO_2, TeO_2;

D) O_2, SeO_2, NO_2, N_2O_3, SiF_4, NO;

E) SO_3, SiF_4, NO, N_2, SiF_4, NO_2.

40. The catalyst used in the reaction $SO_2 + 1/2O_2 = SO_3 + Q$ is:

A) vanadium catalyst;

B) ruthenium catalyst;

C) rhodium catalyst;

D) platinum-rhodium catalyst;

E) iron-chromium catalyst.

41. The general reaction for firing sulfur pyrite is described by the equation:

A) $4FeS + 7O_2 = 4SO_2 + 2Fe_2O_3$;

B) $2FeS_2 + 3O_2 = 2FeS + 2SO_3$;

C) $FeS_2 \rightarrow FeS + S$;

D) $4FeS_2 + 11O_2 = 8SO_2 + 2Fe_2O_3$;

E) $3FeS + 5O_2 = 3SO_2 + Fe_3O_4$.

42. Pyrite firing is carried out at a temperature of ºC:

A) 350-420;

B) 1,000-1,020;

C) 300-450;

D) 750-850;

E) 1,300-1,400.

43. Sulfuric acid concentration at the inlet and outlet of the 1st drying tower, %:

A) 98.3-98.7;

B) 93-92.5;

C) 25-27;

D) 95-98;

E) 37-38.5.

44. The concentration of sulphuric acid, irrigating the 2nd drying tower, %:

A) 93-92.5;

B) 95;

C) 75-76;

D) 25;

E) 25-27.