D) carnallites;
E) red phosphorus.

43. The main stages of obtaining thermal phosphoric acid are:

A) storage and transportation of phosphorus → combustion and hydration of P_4 → gas cooling and hydration of P_4O_{10} → gas purification;

B) calcination of the charge → leaching → filtration → smelting → cooling → finished product;

C) charge sintering → crushing → classification → packing → gas purification → finished product;

D) charge preparation → calcination → quenching and leaching → solution evaporation→ dehydration and melting;

E) charge mixing → leaching → solution evaporation→ melting → gas cooling and hydration P_4O_{10} → gas purification.

44. According to State Standard, thermal phosphoric acid (technical) of grades 1 and 2 contains:

A) not less than 70% H_3PO_4;
B) not less than 70% H_3PO_3;
C) not less than 80% H_3PO_4;
D) not less than 70% $H_5P_3O_{10}$;
E) not less than 80% $H_4P_2O_7$.

45. According to State Standard, reactive thermal phosphoric acid contains:

A) 85-87% H_3PO_4;
B) 30-47% H_3PO_3;
C) 50-60% H_3PO_4;
D) 45-55% $H_5P_3O_{10}$;
E) 70-90% $H_4P_2O_7$.

46. The mass fraction of orthophosphoric acid of qualification “pure” and “pure for analysis” is not less than:

A) 85% H_3PO_4;
B) 100% H_3PO_4;
C) 55% H_3PO_4;
D) 15% H_3PO_4;
E) 99% H_3PO_4.

47. The raw materials for the production of phosphoric acid of the qualifications “pure” and “pure for analysis” are:

A) tripolyphosphoric acid, potassium sulphide and activated carbon;
B) extraction phosphoric acid, potassium sulphide and charcoal;
C) pyrophosphoric acid, sodium sulfate and activated carbon;
D) superphosphoric acid, calcium sulphide and activated carbon;
E) thermal phosphoric acid, sodium sulfide and activated carbon.

48. To purify thermal phosphoric acid from arsenic and lead, the following is used:

A) $H_2S_2O_8$;
B) H_2SO_3;
C) H_2SO_4;
D) $H_2S_2O_3$;
E) H_2S.