

- C) a production column;
- D) a wash column;
- E) a synthesis column.

31. Ammonia synthesis columns are made of the following structural material:

- A) steel;
- B) cast iron;
- C) aluminum alloy;
- D) brass;
- E) silunite.

32. The temperature of condensation of ammonia, °C:

- A) 40;
- B) 60;
- C) 25-30;
- D) 50-55;
- E) 65.

33. The directions of consumption of commodity ammonia are the production of:

- A) nitric acid, urea, ammophos;
- B) sulfuric acid, ammophos;
- C) hydrochloric acid, ammonium nitrate, ammonium chloride;
- D) hydrochloric acid, ammonium sulfate;
- E) milk of lime, TNT.

34. The explosive limit of ammonia in air (NH₃, %) corresponds to the values:

- A) 5-15;
- B) 29-57;
- C) 15.5-27;
- D) 17.5-46.5;
- E) 45-77.

35. The main stages of obtaining diluted nitric acid:

- A) electrolysis of sodium chloride solution → hydrogen production → ammonia synthesis;
- B) contact oxidation of pyrites to SO₂ → oxidation of SO₂ to SO₃ → absorption of SO₃ by water;
- C) methane conversion from natural gas → hydrogen production → ammonia synthesis;
- D) the conversion of carbon monoxide from water gas → hydrogen production → ammonia synthesis;
- E) contact oxidation of ammonia to NO → oxidation of NO to NO₂ → absorption of NO₂ by water.

36. The catalyst for the oxidation of ammonia to nitric oxide in the production of dilute nitric acid is:

- A) Cobalt;
- B) Nickel;
- C) Platinum;
- D) Vanadium;
- E) Manganese.

37. The main stages of the technology for producing nitric acid:

- A) ammonia oxidation, gas cooling, NO oxidation, NO₂ absorption;