

- B) partial use of raw materials and energy;
- C) high yield of the target product;
- D) cost-effectiveness;
- E) low power consumption.

27. The advantages of electrochemical production methods over chemical ones are as follows:

- A) partial use of raw materials and energy;
- B) the simultaneous production of several products;
- C) high yield of the target product;
- D) profitability;
- E) low power consumption.

28. Technological parameters of the process of liquefaction of chlorine:

- A) $P = 10-12 \text{ atm}$;
- B) $P = 10-12 \text{ atm}$, $T = -50 \text{ }^\circ\text{C}$;
- C) $P = 3-6 \text{ atm}$, $T = 25 \text{ }^\circ\text{C}$.
- D) $T = 1 \text{ atm}$, T_{ambient} ;
- E) $T = 40 \text{ atm}$, $T = -50 \text{ }^\circ\text{C}$;

29. Technological parameters of the process of liquefaction of chlorine:

- A) $P = 10-12 \text{ atm}$, $T = -50 \text{ }^\circ\text{C}$;
- B) $P = 3-6 \text{ atm}$, $T = 25 \text{ }^\circ\text{C}$;
- C) $T = 1 \text{ atm}$, T_{ambient} ;
- D) $T = 1 \text{ atm}$, $T = -50 \text{ }^\circ\text{C}$;
- E) $T = 1 \text{ atm}$, $T = 10 \text{ }^\circ\text{C}$.

30. Technological parameters of the process of liquefaction of chlorine:

- A) $P = 10 \text{ atm}$, $T = 25 \text{ }^\circ\text{C}$;
- B) $T = 1 \text{ atm}$, T_{ambient} ;
- C) $P = 3-6 \text{ atm}$, $T = -5 \text{ }^\circ\text{C}$ to $+25 \text{ }^\circ\text{C}$;
- D) $P = 10 \text{ atm}$, $T = -50 \text{ }^\circ\text{C}$;
- E) $T = 1 \text{ atm}$, T_{ambient} .

31. Disadvantage of the sulphate method of hydrogen chloride production:

- A) uneconomical process;
- B) hydrochloric gas contains only 30-40% HCl, which makes it possible to obtain hydrochloric acid containing 27.5 % HCl;
- C) bulkiness of the furnace;
- D) nitric acid is consumed;
- E) hydrochloric acid is obtained with a concentration of no more than 10 %.

32. Disadvantage of the sulphate method of hydrogen chloride production:

- A) uneconomical process;
- B) bulkiness of the furnace;
- C) the presence of impurities in the gas that pollute hydrochloric acid;
- D) nitric acid is consumed;
- E) explosion hazard.

33. The disadvantage of the sulphate method of producing hydrogen chloride is as follows:

- A) the complexity of the process;