

21. Electrolysis of an aqueous solution of table salt is carried out on the following anodes:

- A) ruthenium oxide anode;
- B) nickel anode coated with a layer of titanium oxide;
- C) graphite or titanium anodes;
- D) cobalt anode;
- E) a copper anode coated with a layer of ruthenium oxide.

22. The main stages and technological process of production of sodium hydroxide, chlorine and hydrogen from NaCl by electrolysis:

- A) distillation of electrolysis products;
- B) grinding of raw materials;
- C) flotation separation of electrolysis products;
- D) extraction separation of electrolysis products;
- E) preparation of raw materials for electrolysis.

23. The production of sodium hydroxide, chlorine and hydrogen from NaCl by electrolysis passes through the following stages of the process:

- A) distillation and purification of electrolysis products;
- B) flotation separation of electrolysis products;
- C) extraction separation of electrolysis products;
- D) purification of electrolysis products;
- E) distillation of electrolysis products.

24. The stages of the technological process for the production of sodium hydroxide, chlorine and hydrogen from NaCl by electrolysis are:

- A) flotation separation of electrolysis products;
- B) grinding raw materials for electrolysis;
- C) processing of electrolysis products;
- D) extraction separation of electrolysis products;
- E) distillation and purification of electrolysis products.

25. The main advantage of the membrane method of electrolytic production of caustic soda compared with diaphragm:

- A) sodium ions and partially water do not pass through the membrane to the cathode;
- B) the polymer membrane separates the anode and cathode space and facilitates the passage of NaCl from the brine to the cathode;
- C) a polymer membrane promotes the transfer of OH⁻ ions to the anode of the cell;
- D) the polymer membrane separates the anode and cathode space and prevents NaCl from entering the brine on the cathode;
- E) no advantage.

26. Indicate the advantages of the membrane method of electrolytic production of caustic soda in comparison with the diaphragm:

- A) the polymer membrane facilitates the transfer of OH⁻ ions to the anode of the electrolyzer;
- B) the polymer membrane separates the anode and cathode space and facilitates the ingress of NaCl from the brine to the cathode;
- C) the polymer membrane prevents the transfer of OH⁻ ions to the anode of the electrolyzer;
- D) sodium ions and partially water do not pass through the membrane to the cathode;
- E) both processes increase the yield of alkali.