26. What water hardness is eliminated by this reaction 2NaAlSiO₄+CaCl₂=Ca(AlSiO₄)₂+2NaCl?

- A) temporary;
- B) carbonate;
- C) resistant;
- D) average;
- E) general.

27. Cation exchange resin to eliminate water hardness corresponds to the formula:

- A) $[Cat^{+}]An^{-}$;
- B) [An] Cat⁺;
- C) [CatAn];
- D) [CatAn]An;
- E) H [Cat].

28. When boiling water, the following reaction occurs:

- A) $Ca(HCO_3)_2 \rightarrow CaCO_3 + H_2O + CO_2;$
- $Ca(HCO_3)_2 + Ca(OH)_2 \rightarrow CaCO_3 + 2H_2O;$
- $Ca(OCI)_2 + CO_2 + H_2O \rightarrow CaCO_3 + 2 HCIO;$
- $CaCI_2 + Na_2CO_3 \rightarrow 2NaCI + CaCO_3$:
- $Ca(HCO_3)_2 \rightarrow CaO + H_2O + CO_2.$

29. The constant water hardness is due to the content in water:

- A) calcium and magnesium bicarbonates;
- B) bicarbonates and sulfates of calcium and magnesium;
- C) chlorides, sulfates, sodium nitrates;
- D) chlorides, sulfates, calcium and magnesium nitrates;
- E) sodium and potassium bicarbonates.

30. The temporary hardness of the water is due to the content in the water:

- A) calcium and magnesium bicarbonates;
- B) sodium and potassium bicarbonates;
- C) chlorides, sulfates, calcium and magnesium nitrates;
- D) chlorides, sulfates, sodium nitrates:
- E) bicarbonates and chlorides of calcium and magnesium.

31. Water hardness is determined by:

- A) the content of salts of calcium and magnesium;
- B) the content of alkali metal sulfates;
- C) chloride content;
- D) borate content;
- E) the content of nitrates and sulfates of metals.

32. The equilibrium constant of the nitrogen oxidation reaction by air depends on:

- A) temperature;
- B) the concentration of nitrogen;