

- B) the catalyst reduces the activation energy and increases the speed;
- C) the catalyst only takes part in elementary reactions;
- D) the catalyst reduces the rate of the overall reaction;
- E) the catalyst increases the rate of side reactions.

25. Catalysts are classified by the value of the activity index into:

- A) highly active - a little over 45;
- B) highly active - more than 50;
- C) medium active - 45-50;
- D) inactive - less than 45;
- E) highly active - more than 55.

26. Catalysts are classified by the value of the activity index into:

- A) medium-active - about 35;
- B) highly active - more than 50;
- C) medium active - 45-50;
- D) inactive - less than 45;
- E) medium active - 45-55.

27. The catalysts are classified by the value of the activity index into:

- A) inactive - less than 35;
- B) highly active - more than 50;
- C) inactive - less than 45;
- D) highly active more than 55;
- E) medium active - 45-55.

28. Chemical catalytic processes are called homogeneous if:

- A) the feedstock, catalyst and reaction products are in one phase;
- B) the starting reagents and reaction products are in different phases;
- C) the feedstock, catalyst and products are in different aggregate states;
- D) the starting reagents are in one phase, and the catalyst is in another phase;
- E) the process proceeds in the gas phase on the surface of the solid catalyst.

29. Chemical catalytic processes are called homogeneous if:

- A) the starting reagents, the catalyst and the reaction products are in different phases;
- B) raw materials, catalyst and products are in different aggregate States;
- C) the starting reagents are in one phase and the catalyst is in another phase;
- D) there is no phase boundary between the raw material, the catalyst and the reaction products;
- E) there is a phase boundary between the raw material, the catalyst and the reaction products.

30. The rate of a homogeneous reaction is determined by the equation:

- A) $V = \pm \frac{1}{\tau} \frac{dn_j}{dc}$;
- B) $V = \pm \frac{1}{s} \frac{dc}{dn_A}$;
- C) $V = \pm \frac{1}{v} \frac{dn_A}{dt}$;
- D) $V = R \cdot F \cdot C$;
- E) $V = k(C_A - C_B)^n$.