

1. Transformation of aromatic aldehydes to alcohol and salt at reacting with KOH
  - A) Markovnikov reaction
  - B) Fridel-Krafts reaction
  - C) Konovalov reaction
  - D) Favorsky reaction
  - E) Kanniccaro reaction
2. Oxides of arsenium
  - A)  $\text{As}_2\text{O}_3$ ,  $\text{As}_2\text{O}_7$
  - B)  $\text{As}_2\text{O}_3$ ,  $\text{As}_2\text{O}_5$
  - C)  $\text{As}_2\text{O}_5$ ,  $\text{As}_2\text{O}_7$
  - D)  $\text{AsO}_3$ ,  $\text{AsO}_7$
  - E)  $\text{As}_2\text{O}_5$ ,  $\text{AsO}_7$
3. Water and oxygen under the conditions of 25 °C and 1 atm
  - A) both are solids
  - B) liquid and gas
  - C) both are gases
  - D) gas and solid
  - E) both liquids
4. Chemical formula of butyl aldehyde
  - A)  $\text{C}_4\text{H}_8\text{O}$
  - B)  $\text{C}_4\text{H}_7\text{O}$
  - C)  $\text{C}_4\text{H}_6\text{OH}$
  - D)  $\text{C}_4\text{H}_9\text{OH}$
  - E)  $\text{C}_4\text{H}_8\text{OH}$
5. The amount of carbon needed to form 88 g of  $\text{CO}_2$ 
  - A) 1 mol
  - B) 2.5 mol
  - C) 3 mol
  - D) 3.5 mol
  - E) 2 mol
6. To obtain a water molecule, 16 g of oxygen should interact with
  - A) 1 g of hydrogen
  - B) 0.5 g of hydrogen
  - C) 2 g of hydrogen
  - D) 4 g of hydrogen
  - E) 0.04 g of hydrogen
7. Find the amount of HCl needed to completely neutralize of 2 liters of 1.5 mol/L KOH aqueous solution
  - A) 4 mol
  - B) 2 mol
  - C) 1.5 mol
  - D) 3 mol
  - E) 5 mol

8. Formula of potassium hypochlorite

- A)  $\text{KClO}_2$
- B)  $\text{KClO}_3$
- C)  $\text{KClO}_7$
- D)  $\text{KClO}_4$
- E)  $\text{KClO}$

9. Statement that can not be applied to nitrobenzene

- A) heavier than water
- B) well soluble in water
- C) in industry, is used almost solely to produce aniline
- D) colourless liquid under the standard conditions
- E) can be used as solvent for some substances

10. The common formula of alkadienes

- A)  $\text{C}_n\text{H}_{2n-1}$
- B)  $\text{C}_n\text{H}_{2n+1}$
- C)  $\text{C}_n\text{H}_{2n+2}$
- D)  $\text{C}_n\text{H}_{2n-2}$
- E)  $\text{C}_n\text{H}_{2n}$