STUDENT SELECTION FOR DISTRICT LEVEL

Grade 9 - School Year 2017-2018

CHEMISTRY

Lesson duration: minutes

(10 questions, 02 pages)

**Tests**

**Question 1** (1 point): The atom of the element R has a total number of particles of 36. In which the number of charged particles is greater than the number of non-charged particles 12. Determine R.

**Question 2** (1 point): There are four metals: A, B, C, D behind Mg in the range of chemical activity of the metal. Know that:

- A and B work with HCl solution and release hydrogen gas.

- C and D are not reacting with HCl solution

- B works with saline solution of A and liberates A.

- D works with saline solution of C and liberates C.

Let's define the order of sorting in ascending direction.

**Question 3** (1 point): There are 3 solutions K2SO4, K2CO3, Ba (CO3) 2. You can not use the solution below to identify the solution.

A. HCl solution B. H2SO4 solution

C. HNO3 solution D. H2S solution

**Question 4** (1 point): Choose the appropriate substances for the following metabolic sequence:

CaCl2 (1) C2H2 (2) C2H6 (3) C2H5Cl (4) C2H5OH

**Question 5** (1 point): Give 20 grams of mixture X containing CuO and Fe2O3. Apply sufficiently with 0.2 liters of HCl 3.5M solution.

What percentage of the mass of the substance in X?

Question 6 (1 point): Select the phenomena in column II coupled with the experiments in column I as appropriate.

|  |  |
| --- | --- |
| **I.**Experiment  | II. Phenomena |
| 1. Put iron nails into CuSO4 solution  | A. Appearance of insoluble white solid |
| 2. Apply a solution of HCl to AgNO3  | B. Solution of colorless gas |
| 3Add NaOH solution to CuSO4 solution  | C. Appear blue solid |
| 4. Add a solution of HCl to Na2CO3 solution | D. Appearance of insoluble solid red |
|  | E. Displacement of solid red insoluble matter on iron nail surface, blue color of solution diminished |

**Question 7** (1 point): Find the chemical formula of an iron oxide, know the molecular mass of 160 and the mass ratio of iron is 7 parts and the oxide is 3 parts.

**Question 8** (1 point): Give 2-24 liters of CO2 (in titrator), which is sufficiently effected with 200ml of Ba (OH) 2 solution to form white insoluble substance. What is the molar concentration of Ba (OH) 2 solution?

**Question 9** (1 point): There is a mixture of white powder Al, Al2O3 and Mg in a bottle. To filter pure magnesium, it is poured into the solution containing the following substances: HCl, H2SO4, KOH, CuSO4

**Question 10** (1 point): Give the hydrogen gas pass through 0.8 grams of CuO to heat. After the reaction, 0.672 grams of solid are obtained. What is Cu removal efficiency?

------------end----------

**Self-concept**

**Question 11**: Dissolve a mixture of 3 Fe, Al, Cu metal with concentrated H2SO4 solution, heat is enough to escape 15.68 liters of SO2 (in TOR) and get solution X. Split X Half of the dried herbs received 45.1 grams of anhydrous salt, while half of the excess NaOH solution, filtered to remove the precipitate in air to a constant weight of 12 grams.

a. Write the chemical equation occurs ?

b. Find a?

c. Calculate the percentage of each metal in the original mixture.

*ANSWER IS SELECTED FROM THE DISTRICT LEVEL*

*Grade 9 - 2017 - 2018 school year*

*CHEMISTRY*

*(05 pages)*

*Attention:*

*- Candidates who do otherwise will be given maximum marks.*

*- Score 10 points.*

|  |  |  |
| --- | --- | --- |
| **Question** | **Keys** | **point** |
| **1****(1point)** |  |
| Mg  |  |
| **2****(1 point)** |  | (1 **point**) |
| C, D, A, B |  |
| **3****(1 point)** | 1. **point**)
 |
|  H2S |  |
| **4****(1 point)** | (1 **point**) |
| 1. H2O
2. H2
3. Cl2
4. NaOH
 |  |
| **5****(1 point)** | (1 **point**) |
| 20% CuO80% Fe2O3 |  |
| **6****(1 point)** |  (1 **point**) |
| 1. E
2. A
3. C
4. B
 |  |
| **7****(1 point)** | (1 **point**) |
| Fe2O3 |  |
| **8****(1 point)** | **(1 điểm)** |
|  Ba(OH)2  + CO2 → BaCO3 ↓ + H2O*The molar ratio of the Ba (OH) 2 solution is 0.25 M* |  |
| **9****(1 point)** | (1 **point**) |
| KOH |  |
| **10****(1 point)** | (1 **point**) |
| 80% |  |

*Self-concept*

***Question 11:***

*a. There are 9 PTHH*

*b. The volume of a is 23 grams*

*c. % Fe = 48.7%*

*% Al = 23.48%*

*% Cu = 27.82%*

***The teacher came out***

***Pham Thi Thao***

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***https://www.vnteach.com***