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| SỞ GIÁO DỤC & ĐÀO TẠOTHÀNH PHỐ HỒ CHÍ MINH**TRƯỜNG THPT THẠNH LỘC** | **ĐÁP ÁN ĐỀ KIỂM TRA GIỮA KỲ – HKI****NĂM HỌC: 2022 – 2023****Môn: HOÁ HỌC – KHỐI 11 (XH)**  |

**I. Trắc nghiệm (3 điểm)**

***Mỗi đáp án đúng 0,25đ* x *12 câu***

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| ***139*** |  | ***365*** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| C | A | D | C | D | B | B | D | A | A | C | B |  | C | A | A | A | B | C | B | D | B | C | D | D |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***298*** |  | ***457*** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| C | B | C | A | B | D | A | A | B | C | D | D |  | A | D | C | D | B | C | D | C | B | A | B | A |

**II. Tự luận (7 điểm)**

**Câu 1:** *(1đ)*Mỗi phương trình ion đúng: ***0,25đ x 4***

Sai hai lỗi trở lên trừ 0,25đ.

H2SO4 $\rightarrow $ 2H+ + $SO\_{4}^{2-}$ HClO $\rightarrow $ H+ + ClO-

CuSO4 $\rightarrow $ Cu2+ + $SO\_{4}^{2-}$ Ba(OH)2 $\rightarrow $ Ba2+ + 2OH-

**Câu 2:** *(2đ)*

Mỗi phương trình phân tử đúng: ***0,5đ x 2***

Mỗi phương trình ion rút gọn đúng: ***0,5đ x 2***

1. KOH + H2SO4 $\rightarrow $ K2SO4 + H2O  PT ion rút gọn: H+ + OH- $\rightarrow $ H2O
2. Na2CO3 + 2HCl $\rightarrow $ 2NaCl + H2O + CO2 PT ion rút gọn: 2H+ + $CO\_{3}^{2-}$ $\rightarrow $ H2O + CO2

**Câu 3:** *(2đ)*

|  |  |
| --- | --- |
| $n\_{HNO\_{3}}=0,03 $(mol) | ***(0,25đ)*** |
| $n\_{H\_{2}SO\_{4}}=$ 5.10-3 = 0,005 (mol) | ***(0,25đ)*** |

* ***Ban đầu:***

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* ***Sau khi trộn:*** Vdd(A) = 300 + 100 = 400 ml = 0,4l

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| --- | --- | --- | --- |
| HNO3 $\rightarrow $ H+ + $NO\_{3}^{-}$

|  |  |
| --- | --- |
| 0,03 $\rightarrow $ | 0,03 (mol) |

 | ***(0,25đ)*** |
| H2SO4 $\rightarrow $ 2H+ + $SO\_{4}^{2-}$

|  |  |
| --- | --- |
| 0,005  | $\rightarrow $0,01 (mol) |

 | ***(0,25đ)*** |
| $Σn\_{H^{+}}=$ 0,04 (mol)  | ***(0,25đ)*** |
| $$C\_{M \left(H^{+}\right) trong dd \left(A\right)}=0,1 M$$ | ***(0,25đ)*** |
| pH = -log ([H+]) = - log (0,1) = 1 | ***(0,5đ)*** |

**Câu 4:** *(2đ)*

|  |  |
| --- | --- |
| $n\_{NaOH}=0,25 $(mol) | ***(0,25đ)*** |
| $C\_{M \left(NaOH\right) }=$ 0,5 M | ***(0,25đ)*** |
| NaOH $⟶$ Na+ + OH- |  |
| [Na+] = 0,5 M | ***(0,25đ)*** |
| [OH-] = 0,5 M | ***(0,25đ)*** |

|  |  |
| --- | --- |
| $n\_{OH^{-}}=$ 0,25 (mol) | ***(0,25đ)*** |
| H+ + OH- $⟶$ H2O Hoặc NaOH + HCl $⟶$ NaCl + H2O  | ***(0,25đ)*** |
| $n\_{OH^{-}}= n\_{H^{+}}$= $n\_{HCl}$ = 0,25 (mol) | ***(0,25đ)*** |
| $V\_{HCl}=$ 0,5l = 500ml | ***(0,25đ)*** |