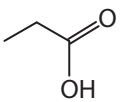


PADRÃO DE RESPOSTAS – QUÍMICA

Questão	Resposta
1	1 mol $\text{KMnO}_4 = 158 \text{ g} \cdot \text{mol}^{-1}$
	A) $\text{Concentração} = \frac{\text{massa}}{\text{mol} \times \text{volume}} = \frac{0,316 \text{ g}}{158 \frac{\text{g}}{\text{mol}} \times 2 \text{ L}} = 10^{-3} \text{ mol} \cdot \text{L}^{-1}$
2	B) ${}^{+1}x \quad {}^{-2}4$ $\text{KMnO}_4 \Rightarrow +1 + x - 2 \times 4 = 0$ $x = +7$
	A) $160 \text{ g Fe}_2\text{O}_3 \rightarrow 112 \text{ g Fe}$ $X \rightarrow 112 \text{ kg} \quad X = 160 \text{ kg}$ $200 \text{ kg} \rightarrow 100\%$ $160 \text{ kg} \rightarrow Y \quad Y = 80\%$
3	B) Dióxido de carbono $\text{O} = \text{C} = \text{O}$
	A) Reação de adição C_4H_{10}
4	B) butan-2-ol
	A) $\text{Pd}(\text{NO}_3)_2$ $\text{Pd}^{2+}(\text{aq}) + 2 \text{ e}^- \rightarrow \text{Pd}(\text{s})$ Para a deposição de 106,5 g de Pd são necessários 2 mols de elétrons: $Q = 2 \text{ mol} \times 96500 \text{ C} \cdot \text{mol}^{-1} = 1,93 \times 10^5 \text{ C}$ $106,5 \text{ g} \rightarrow 1,93 \times 10^5 \text{ C}$ $2130 \text{ g} \rightarrow X \quad X = 3,86 \times 10^6 \text{ C}$ $Q = i \times t \Rightarrow t = \frac{Q}{i} = \frac{3,86 \times 10^6}{1000} = 3860 \text{ s}$

PADRÃO DE RESPOSTAS – QUÍMICA

5	A)	
		$C_3H_6O_2$
		$pH = -\log [H^+] = 3 \Rightarrow [H^+] = 10^{-3} \text{ mol.L}^{-1}$
	B)	$[H^+] = [\text{propanoato}] = 10^{-3}$ $[\text{ácido}] = 2,3 \times 10^{-3} - 10^{-3} = 1,3 \times 10^{-3} \text{ mol.L}^{-1}$