



Sample Questions for Section on Numerical Value-Chemistry

Q.1: The hardness of a water sample (in ppm) (in terms of equivalents of CaCO_3) containing 10^{-3}M CaSO_4 is : (molar mass of $\text{CaSO}_4 = 136\text{g/mol}$).

Answer : 100

Q.2: 50mL of 0.5M Oxalic Acid is needed to neutralize 25mL of sodium hydroxide solution. The amount of NaOH (in g) in 50mL of the given sodium hydroxide solution is _____.

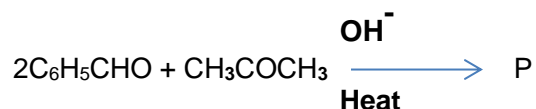
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Answer : 2

Q.3: The standard electrode potential E° and its temperature coefficient $(dE^\circ/dT)_p$ for a cell are 2V and $-5 \times 10^{-4} \text{VK}^{-1}$ at 300K respectively. The cell reaction is $\text{Zn(s)} + \text{Cu}^{2+}(\text{aq}) \rightarrow \text{Zn}^{2+}(\text{aq}) + \text{Cu(s)}$. The standard reaction enthalpy $(\Delta_r H^\circ)$ at 300K is _____ kJ/mol ($F = 96485 \text{C mol}^{-1}$)

Answer : -414.9

Q.4: In the following reaction sequence, the mass percentage of carbon in the major product P is _____.



Answer : 87.18

Q.5: The number of monochlorinated product obtained on chlorination of 2 methylbutane is _____.

Answer : 4