Date Planned : __ / __ / __	Daily Tutorial Sheet - 6	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level - 2	Exact Duration :_____

76. 10 g of dolomite contains

(A) 0.1 mole of $CaCO_3$ **(B)** 0.108 g atom of C

(C) 6×10^{23} atoms of Ca **(D)** 1 g equivalent of Ca

77. A candle is burnt in a beaker until it extinguishes itself. A sample of gaseous mixture in the beaker contains 6.08×10^{20} molecules of N_2, 0.76×10^{20} molecules of O_2, and 0.50×10^{20} molecules of CO_2. The total pressure is 734 mm of Hg. The partial pressure of O_2 would be

(A) 760.0 mm of Hg **(B)** 76.0 mm of Hg

(C) 7.6 mm of Hg **(D)** 0.76 mm of Hg

78. The per cent loss in weight after heating a pure sample of $KClO_3$ (molecular weight = 122.5) will be

(A) 12.25 **(B)** 24.50 **(C)** 39.18 **(D)** 49.0

79. 1.0 g of a monobasic acid when completely acted upon Mg gave 1.301 g of anhydrous Mg salt. Equivalent weight of acid is

(A) 35.54 **(B)** 36.54 **(C)** 17.77 **(D)** 18.27

80. 0.1 g of metal combines with 46.6 mL of oxygen at STP. The equivalent weight of metal is

(A) 12 **(B)** 24 **(C)** 6 **(D)** 36

81. Density of water is 1.00 g/cm^3 and density of ethanol is 0.9 g/cm^3. If these two liquids were mixed to prepare a dilute solution then

(A) density of the solution > 1.00 g/cm^3 **(B)** density of the solution < 1.00 g/cm^3

(C) density of the solution < 0.9 g/cm^3 **(D)** density of the solution = 1 g/cm^3

82. Potassium selenate is isomorphous with potassium sulphate and contains 50.0% of Se. Find the atomic weight of Se.

(A) 142 **(B)** 71 **(C)** 47.33 **(D)** 284

83. The equivalent weight of an element is 13. It forms an acidic oxide which with KOH forms a salt isomorphous with K_2SO_4. The atomic weight of element is

(A) 13 **(B)** 26 **(C)** 52 **(D)** 78

84. 0.05 g of a piece of metal in dilute acid gave 24.62 mL of H_2 at 27°C and 760 mm pressure. The Equivalent weight of metal is

(A) 25 **(B)** 12.5 **(C)** 50 **(D)** 37.5

85. What volume of HCl solution of density 1.2 g/cm^3 and containing 36.5 % by mass HCl, must be allowed to react with zinc (Zn) in order to liberate 4.0 g of hydrogen?

(A) 333.33 mL **(B)** 500 mL **(C)** 614.66 mL **(D)** None of these