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

76. pK_a of a weak acid is defined as :

(A) $\log K_a$ **(B)** $\frac{1}{\log K_a}$ **(C)** $\log \frac{1}{K_a}$ **(D)** $-\log \frac{1}{K_a}$

77. The value of the ionic product of water depends :

(A) on volume of water **(B)** on temperature

(C) changes on adding acid or alkali **(D)** always remain constant

78. An electrolyte,

(A) gives complex ions in solution

(B) dissolves in water to give ions

(C) is ionised in the solid state

(D) generates ions on passing electric current

79. Which one is strongest electrolyte in the following ?

(A) NaCl **(B)** CH_3COOH **(C)** NH_4OH **(D)** $C_6H_{12}O_6$

80. Which of the following factors will not affect the degree of ionisation ?

(A) Temperature **(B)** Concentration

(C) Type of solvent **(D)** Current

81. The degree of dissociation of 0.1 M HCN solution is 0.01%. Its ionisation constant would be :

(A) 10^{-3} **(B)** 10^{-5} **(C)** 10^{-7} **(D)** 10^{-9}

82. Degree of dissociation of 0.1 N CH_3COOH is (dissociation constant = 1×10^{-5})

(A) 10^{-5} **(B)** 10^{-4} **(C)** 10^{-3} **(D)** 10^{-2}

83. Which is Bronsted lowry acid as well as Arrhenius acid.

(A) H_2 **(B)** HCO_3^- **(C)** NH_3 **(D)** NH_2^-

84. In the reaction $HCl + H_2O \rightleftharpoons H_3O^+ + Cl^-$

(A) H_2O is the conjugate base of HCl acid

(B) Cl^- is the conjugate base of HCl acid

(C) Cl^- is the conjugate acid of H_2O base

(D) H_3O^+ is the conjugate base of HCl

85. The conjugate acid of NH_3 is :

(A) NH_3 **(B)** NH_4^+ **(C)** N_2H_4 **(D)** NH_2OH