1. Non mono chromatic light used in an experiment of PEE the stopping potential is related to shortest wavelength (or larger frequency)

3. In fission and fusion, sum of binding energy of products are greater than sum of binding energy of parent.

7. In fission, about 93% of released energy appears in the form of kinetic energies of products.

9. Energy of photon
   \[ E = (939 \text{ MeV} + 940 \text{ MeV}) - (1876 \text{ MeV}) \]
   \[ = 3 \text{ MeV} \]

11. KE = \[ \frac{E_r - 1.02 \text{MeV}}{2} \] and \[ E_r = \frac{hc}{\lambda} \]

15. Activity = \( N \frac{\lambda}{\lambda} \)

\[ N_2 = N_1 \lambda \text{ or } \lambda_2 = \frac{N_2}{N_1} \]

25. KE = 2\( E_0 - E = E_0 \) (for \( 0 \leq x \leq 1 \))

So \[ \lambda_1 = \frac{h}{\sqrt{2mE_0}} \] ...(1)

Again KE = 2\( E_0 \) (for \( x > 1 \))

\[ \lambda_2 = \frac{h}{\sqrt{2mE_0}} \] ...(2)

from equation (1) and (2)

\[ \frac{\lambda_1}{\lambda_2} = \sqrt{2} \]

27. \( (PC)_{\text{photon}} > (PC)_{\text{electron}} \) and \( \lambda = \frac{h}{p} = \frac{hc}{pc} \)

\[ \therefore \lambda_{\text{photon}} < \lambda_{\text{electron}} \]
46. NCERT Page no. # 83
   Faraday’s laws of electrolysis

48. NCERT Page no. # 83
   Faraday’s laws of electrolysis
   \[2I^- \rightarrow I_2 + 2e^-\]

52. NCERT Page no. # 76 equation (3.20)
   \[K = C \times \ell/a\]

54. NCERT Page no. # 84/3.5.1
   After electrolysis of CuSO₄, H₂SO₄ remains in the solution so, pH of solution decreases.

66. NCERT Page no. # 81-82/equations (3.24) and (3.26)
   \[\alpha = \frac{\lambda_{\text{eq}}}{\lambda_{\text{cr}}} = \frac{K \times 1000/N}{\lambda_{\text{eq}}^{c} + \lambda_{\text{cr}}^{c}} = \frac{0.0092 \times 1000/0.1}{43 + 65}\]

68. \[(t_{1/2})_1 = \left(\frac{P_2}{P_1}\right)^{n-1}\]

70. NCERT Page no. # 113/Figure 4.10

72. NCERT Page no. # 113/equation (4.22)
   \[A \rightarrow nB\]
   initially a 0
   after time t(a-x) nx
   At intersection point \([A] = [B]\)
   \[a - x = nx\]
   \[a = nx + x\]
   \[x = \frac{a}{n+1}\]
   \[\therefore [B] = nx = \frac{n[A]_0}{n+1}\]

76. NCERT Page no. # 105/equation (4.15)

78. FeCl₃ + Zn → Fe(OH)₃ + 3HCl is an hydrolysis reaction.

80. Au sol is used in intramuscular injection

84. For sulphides ore only use froath floatation process.

87. Four coordination isomers :-
   \[[\text{Pt(NH}_3]_2\text{Cl}_2[\text{PtCl}_4]\]
   \[[\text{Pt(NH}_3]_2\text{Cl}_3[\text{PtCl}_3(\text{NH}_3)]\]
   \[[\text{Pt(NH}_3]_2\text{Cl}_4[\text{PtCl}_2(\text{NH}_3)_2]\]
   \[[\text{Pt(NH}_3]_2\text{Cl}_5[\text{PtCl(NH}_3)_3]\]

88. CuFeS₂ (copper pyrites)

91. NCERT Page no. 145-E, 156-H

93. NCERT Page no. 148-E, 159-H

95. NCERT Page no. 148-149-E, 160-H

101. NCERT Page no. 147-E, 158-H

107. NCERT Page no. 151-E, 163-H

116. NCERT, Page No. # 242, 243, 244

118. NCERT, Page No. # 247

119. NCERT Page no. 158-E, 171-H

118. NCERT, Page No. # 247

126. NCERT, Page No. # 243

127. NCERT Page no. 158-E, 171-H

128. NCERT, Page No. # 260

129. NCERT Page no. 150-E, 162-H

130. NCERT, Page No. # 251

133. NCERT Page no. 151-E, 163-H

135. NCERT Page no. 145-E, 156-H

136. NCERT, Page No. # 271

138. NCERT, Page No. # 267

140. NCERT, Page No. # 266

142. NCERT, Page No. # 260

144. NCERT, Page No. # 253

146. NCERT, Page No. # 243

148. NCERT, Page No. # 243

150. NCERT, Page No. # 236

152. NCERT, Page No. # 237

154. NCERT, Page No. # 232