

Common ion effect, Isohydric solutions, Solubility product, Ionic product of water and Salt hydrolysis



- (a) More
- (b) Less
- (c) Equal
- (d) Zero

- (a) 108×10^{-25}
- (b) 1.0×10^{-25}
- (c) 144×10^{-25}
- (d) 126×10^{-24}

111. The concentration of KI and KCl in certain solution containing both is 0.001 M each. If 20 ml of this solution is added to 20 ml of a saturated solution of AgI in water? What will happen

- (a) $AgCl$ will be precipitated
- (b) AgI will be precipitated
- (c) Both $AgCl$ and AgI will be precipitated
- (d) There will be no precipitated

112. The solubility product of a sparingly soluble salt AX_2 is 3.2×10^{-11} . Its solubility (in moles / litres) is

- (a) 2×10^{-4}
- (b) 4×10^{-4}
- (c) 5.6×10^{-6}
- (d) 3.1×10^{-4}

113. 0.5 M ammonium benzoate is hydrolysed to 0.25 percent, hence its hydrolysis constant is

- (a) 2.5×10^{-5}
- (b) 1.5×10^{-4}
- (c) 3.125×10^{-6}
- (d) 6.25×10^{-4}

114. The solubility of Sb_2S_3 in water is $1.0 \times 10^{-5}\text{ mol/litre}$ at 298 K . What will be its solubility product

115. The ionic product of water at $25^\circ C$ is 10^{-14} . The ionic product at $90^\circ C$ will be

- (a) 1×10^{-20}
- (b) 1×10^{-12}
- (c) 1×10^{-14}
- (d) 1×10^{-16}

116. In hydrolysis of a salt of weak acid and strong base, $A^- + H_2O \rightleftharpoons HA + OH^-$, the hydrolysis constant (K_h) is equal to.

- (a) $\frac{K_w}{K_a}$
- (b) $\frac{K_w}{K_b}$
- (c) $\sqrt{\frac{K_a}{C}}$
- (d) $\frac{K_w}{K_a \times K_b}$

