

# Solubility Equilibria of Sparingly Soluble Salts MCQs with FREE PDF

1. For the dissociation of an electrolyte  $A_xB_y$ ,  $K_{sp}$  is given as  $[A^{x+}]^x[B^{y-}]^y$ . What is  $K_{sp}$ ?

- a) solubility product
- b) soluble product
- c) solution product
- d) solvent product

**Answer:** solubility product

2. Precipitate is formed if ionic product is \_\_\_\_\_

- a) greater than the solubility product
- b) less than the solubility product
- c) equal to the solubility product
- d) independent of the solubility product

**Answer:** greater than the solubility product

3. Solubility product can be used in predicting the solubility of a sparingly soluble salt.

- a) true
- b) false

**Answer:** true

4. A salt is soluble if the solubility is \_\_\_\_\_

- a) less than 0.01 M
- b) in between 0.01 M and 0.1 M
- c) greater than 0.01 M
- d) greater than 0.1 M

**Answer:** greater than 0.1 M

5. If  $K_{sp}$  of a salt  $A_2B_3$  is given by  $1 \times 10^{-25}$ . Then find the solubility of the salt?

- a)  $10^{-3}$
- b)  $10^{-4}$
- c)  $10^{-5}$
- d)  $10^{-8}$

**Answer:**  $10^{-5}$

6. The solubility for the salts of the type  $AB_3$  is given by \_\_\_\_\_

- a)  $(K_{sp}/27)^{1/4}$

b)  $(K_{sp}/27)^{1/5}$

c)  $(K_{sp}/27)^{3/4}$

d)  $(K_{sp}/27)^{1/4}$

**Answer:**  $(K_{sp}/27)^{1/4}$

*7. Both the solubility product and ionic product are applicable to all types of solutions.*

a) true

b) false

**Answer:** false

*8. The degree of dissociation of Ammonium hydroxide increases in the presence of Ammonium Chloride because of \_\_\_\_\_*

a) solubility product

b) common Ion effect

c) hydrolysis of the salt

d) mixed salts

**Answer:** hydrolysis of the salt

*9. Common Ion effect can be used in which of the following cases?*

a) cloth making

b) alcohol purification

c) quantitative analysis

d) qualitative analysis

**Answer:** qualitative analysis

*10. Hydroxide Ion concentration in calcium hydroxide and barium Hydroxide is an example of \_\_\_\_\_ solution.*

a) isochoric solution

b) isohydric solutions

c) hypo solution

d) hyper solution

**Answer:** isohydric solutions