

Acid-Base Chemistry

Sr	Questions	Answers Choice
1	The pKa value for HCOOH is.	A. 4.74 B. 3.78 C. 4.78 D. 4.24
2	Strong bases have	A. Low Kb B. High Kb C. Low pH D. High Ka
3	pH of 1×10^{-4} M HCl is	A. 4 B. 1 C. 3.5 D. 7
4	The conjugate base of HClO ₄ is	A. ClO ₄ B. ClO ₄ ²⁻ C. hClO ₃ D. H ₂ ClO ₄ ⁺
5	If the concentration of Cl ⁻ ion in a solution is increased, the solubility of silver chloride will	A. Decrease B. Increase C. Remain unchanged D. Become zero
6	Which dialyzing solution has highest pH	A. Vinegar B. Lemon juice C. Ammonia solution D. Coffee
7	Which one of the following compound is added in purification of NaCl in common ion effect.	A. HCl B. H ₂ SO ₄ C. HNO ₃ D. HF
8	Which of the following is a diprotic acid	A. HNO ₃ B. H ₂ SO ₄ C. HCl D. CH ₃ COOH
9	A base that ionizes completely in aqueous solution is called.	A. Strong base B. Weak base C. Conjugate acid D. Neutral
10	The pH of distilled water at 25 °C is	A. 6 B. 7 C. 5 D. 4
11	Which of the following is a Lewis acid but not a Brønsted-Lowry acid	A. HCl B. NH ₃ C. AlCl ₃ D. H ₂ O
12	KOH is an example of	A. Strong Base B. Weak acid C. Neutral salt D. Weak base
13	The strength of base is measured by its.	A. K _a B. K _b C. P _{kw} D. K _w
14	Which has the lowest pH?	A. 0.1 M CH ₃ COOH B. 1 M HCl C. 1 M NH ₃ D. 0.1 M HCl
15	Which is amphoteric	A. H ₂ O B. HCl C. NaOH D. NH ₃

16	Which has the highest pH	A. 0.01 M NaOH B. 0.1 M NaOH C. 0.1 M HCl D. 0.01 M HCl
17	The pH scale ranges typically from	A. 1 -10 B. 0 - 14 C. -1 to 1 D. 7 - 14
18	The Bronsted Lowry definition identifies acid as.	A. Electron pair acceptors B. Proton donors C. Proton acceptors D. Electron pair donors
19	Which is more acidic pH3 or pH5?	A. Both same B. pH 3 C. pH5 D. Cannot say
20	An acid with low K_a value is.	A. Strong B. Weak C. Base D. Neutral