

Acid-Base Chemistry

Sr	Questions	Answers Choice
1	Which of the following is a weak base.	A. KOH B. NaOH C. NH ₃ D. Ca(OH) ₂
2	Litmus turns which color in a basic solution.	A. Red B. Orange C. Blue D. Colorless
3	Which of the following is a Lewis acid but not a Brontsted Lowry acid	A. HCl B. NH ₃ C. AlCl ₃ D. H ₂ O
4	Which of the following is a diprotic acid	A. HNO ₃ B. H ₂ SO ₄ C. HCl D. CH ₃ COOH
5	Which one is a monoprotic acid	A. H ₃ PO ₄ B. H ₂ SO ₄ C. HCl D. H ₂ CO ₃
6	Acid rain is mainly due to	A. SO ₂ and NO ₂ B. CO ₂ C. H ₂ D. CH ₄
7	Which dialyzing solution has highes pH	A. Vinegar B. Lemon juice C. Ammonia solution D. Coffee
8	Which one is a Lewis base.	A. H ⁺ B. NH ₃ C. HCl D. BF ₃
9	A salt that hydrolyzes in water in from	A. Strong acid and base B. Weak acid or base C. None D. Both strong
10	The Ka of a weak acid is 10 ⁻⁵ its pKa is	A. 2 B. 3 C. 5 D. 10
11	The conjugate acid of NH ₃ is	A. NH ₄ B. NH ₂ C. NO ₃ D. N ₂ H ₄
12	A salt from stron acid+weak base gives.	A. Neutral solution B. Acidic solution C. Precipitate D. Basic solution
13	A 0.01 M solution of a strong acid has a pH of	A. 3 B. 2 C. 5 D. 4
14	CH ₃ COONA is a salt of.	A. Strong acid+ Strong base B. Weak acid+Strong base C. None D. Weak base+Weak acid
15	The suppression of ionization of a weak electrolyte by adding common ion is	A. Le-Chatelier's effect B. Common ion effect C. Auf Bau effect D. Hund's rule

16	An acid with low K_a value is.	A. Strong B. Weak C. Base D. Neutral
17	The logarithmic nature of pH means.	A. Each pH unit = 2 x H^+ B. 10 X H^+ Per unit C. H^+ drop linearly D. No change in H^+
18	Which species is both a Bronsted acid and base.	A. H_2O B. Na^+ C. OH^- D. Cl^-
19	In an acid base titration, the equivalence point is reached when.	A. pH of the solution is 7.0 B. The indicator changes color C. Equal volumes of acid and base have been added D. The reaction stops
20	Which of the following is the conjugate base of water.	A. OH^- B. OH^+ C. H_2O D. H_2O^+