

NEET EQUILIBRIUM — SALT HYDROLYSIS — PYQS

Max. Marks: 28

Questions: 7

Section A (MCQ) — 7 questions

Q.1 The pK_b of dimethyl amine and pK_a of acetic acid are 3.27 and 4.77 respectively at T (K). The correct option for the pH of dimethyl ammonium acetate solution is : [NEET (UG) 2021]

- (1) 6.25 (2) 8.50 (3) 5.50 (4) 7.75

Scan or tap for the
full solution



Q.2 Which of the following salts will give highest pH in water? [AIPMT 2014]

- (1) KCl (2) NaCl (3) Na_2CO_3 (4) $CuSO_4$

Scan or tap for the
full solution



Q.3 Equimolar solutions of the following substances were prepared separately. Which one of these will record the highest pH value ? [AIPMT 2012 (Prelims)]

- (1) $BaCl_2$ (2) $AlCl_3$ (3) LiCl (4) $BeCl_2$

Scan or tap for the
full solution



Q.4 The ionization constant of ammonium hydroxide is 1.77×10^{-5} at 298 K. Hydrolysis constant of ammonium chloride is [AIPMT 2009]

- (1) 6.50×10^{-12} (2) 5.65×10^{-13}
 (3) 5.65×10^{-12} (4) 5.65×10^{-10}

Scan or tap for the
full solution



Q.5 Equimolar solutions of the following were prepared in water separately. Which one of the solutions will record the highest pH? [AIPMT 2008]

- (1) $MgCl_2$ (2) $CaCl_2$ (3) $SrCl_2$ (4) $BaCl_2$

Scan or tap for the
full solution



Q.6 Which has highest pH? [AIPMT 2002]

- (1) CH_3COOK (2) Na_2CO_3
 (3) NH_4Cl (4) $NaNO_3$

Scan or tap for the
full solution



Q.7 Which statement is wrong about pH and H^+ ? [AIPMT 2000]

- (1) pH of neutral water is not zero.
 (2) Adding 1 N solution of CH_3COOH and 1 N solution of NaOH, pH will be seven.
 (3) $[H^+]$ of dilute and hot H_2SO_4 is more than concentrated and cold H_2SO_4
 (4) Mixing solution of CH_3COOH and HCl. pH will be less than 7.

Scan or tap for the
full solution



ANSWER KEY

Ques.	1	2	3	4	5	6	7				
Ans.	4	3	1	4	4	2	2				