CHEMISTRY-11	Chapter#08-Second Half(8.3 - 8.9) Test-1A		
	Name:	Class:	ID:
Date: / /	**Marks Total: 25**	**Marks Obtained:**	
Time Allowed: 40 Min.			

Maximum Marks: 09 **(OBJECTIVE TYPE)** Time Allowed: 10 Min.

NOTE: Tick The Correct Option:

1. **The pH of 10^{-3} mole dm^{-3} of an aqueous solution of H_2SO_4 is:**
   (a) 3.0 (b) 2.7 (c) 2.0 (d) 1.5
2. **The value of K_w at 25°C is:**
   (a) 0.11×10^{-14} (b) 0.30×10^{-14} (c) 1×10^{-14} (d) 3×10^{-14}
3. **The pH of the gastric juice is:**
   (a) 2.0 (b) 3.0 (c) 3.5 (d) 5.6
4. **Acid having $K_a > 1$ will be:**
   (a) Weak (b) Very weak (c) Moderate (d) Stronger
5. **By adding NH_4Cl to NH_4OH solution, the ionization of NH_4OH:**
   (a) Increases (b) Decreases
   (c) Remains same (d) Increases 100 times
6. **The solubility of $KClO_3$ in water is suppressed by adding:**
   (a) $KClO_3$ (b) NaCl (c) $KMnO_4$ (d) KCl
7. **pH + pOH = ?**
   (a) K_w (b) pK_a (c) pK_w (d) pK_b
8. **Common ion effect is the application of:**
   (a) Law of mass action (b) Le-Chatelier's Principle
   (c) Buffer (d) All
9. **If K_{sp} is smaller than the ionic product of salt, the result is:**
   (a) Un-saturation (b) Saturation (c) Precipitation (d) None

Maximum Marks: 16 **(SUBJECTIVE TYPE)** Time Allowed: 30 Min.

SECTION-I

Q.2: Give brief answers to the following questions: **(12)**

i. Define pH and pOH. How are they related with pK_w?
ii. What do you mean by percentage ionization of acid?
iii. Define pK_a and pK_b.
iv. Define common ion effect?
v. Define buffer capacity.
vi. What is solubility product? Derive solubility product expression for $PbCl_2$.

SECTION-II

NOTE: Attempt All Questions: **(04)**

Q.3: Define buffers. How can you calculate the pH of a buffer solution?