1**) At the halfway point in the titration of a weak acid:**

A) the pH = 7.00
B) **<u>the pH = pK_a</u>**
C) the pH is half the value of the pH at
the equivalence point
D) cannot tell

2) The solubility of a salt is :

A) equal to the K_{sp}
B) **<u>equal to the concentration of the salt in a saturated solution</u>**
C) equal to the solubility product
constant
D) none of the above

3) What is the pH of the solution at the equivalence point in the titration of 100.0 ml of 0.100 M ammonia with 0.100 M HCl? $K_a^{NH_4^+} = 5.6 \times 10^{-10}$

A) 10.55
B) 5.62
<u>C) 5.28</u>
D) 7.00

For a detailed solution for this problem check Example 18.7 in page 869 of the book.
It is a good idea to check all the examples in the chapter, and to be sure you know how to do these problems for the exam.