Updates and Errata: ACTEX Study Manual for SOA Exam FM, Spring 2018 Edition as of December 4, 2017

Please note the following errors in the Spring 2018 Edition of the manual. In each item, the change is shown in red.

Page M7-47, solution to Problem 4.

The first formula in the solution to part (a) should read as follows:

$$P(i) \approx P(i_0) \cdot \left(\frac{1+i_0}{1+i}\right)^{D_{\text{mac}}(i_0)} = 940.29 \cdot \left(\frac{1.07}{1.071}\right)^{6.5317} = 934.57$$

Page PE1-9, solution to Problem 3.

The first equation should read as follows:

$$K = 475 + 475v = 570v^2 + 570v^3$$

Page PE8-9, Problem 33.

In the second paragraph, delete the comma and the words that follow it. The paragraph should read as follows:

The account earns an annual effective interest rate of 7%.

Page PE11-7, Problem 25.

A) 5.24%

The answer choices should be as follows:

B) 5.61%

The two formulas for *R* and the correct answer choice should be as follows:

D) 5.88%

E) 6.04%

C) 5.73%

$$\begin{split} R &= \frac{2 \cdot f_{[0,1]}^* \cdot P_1 + 3 \cdot f_{[1,2]}^* \cdot P_2 + 4 \cdot f_{[2,3]}^* \cdot P_3}{2 \cdot P_1 + 3 \cdot P_2 + 4 \cdot P_3} \\ &= \frac{2 \cdot 0.044005 \cdot 0.95785 + 3 \cdot 0.052016 \cdot 0.91049 + 4 \cdot 0.066098 \cdot 0.85404}{2 \cdot 0.95785 + 3 \cdot 0.91049 + 4 \cdot 0.85404} \\ &= 0.056079 \end{split}$$

$$R = \frac{\sum_{k=1}^{n} (Q_{t_k} \cdot (P_{t_{k-1}} - P_{t_k}))}{\sum_{k=1}^{n} (Q_{t_k} \cdot P_{t_k})}$$

$$= \frac{2 \cdot (1 - 0.95785) + 3 \cdot (0.95785 - 0.91049) + 4 \cdot (0.91049 - 0.85404)}{2 \cdot 0.95785 + 3 \cdot 0.91049 + 4 \cdot 0.85404}$$

$$= 0.056079$$

Answer: B