

Errata for 10th Edition of Exam FM/2 Manual (Last updated 7/17/11)

[7/17/11] Important note on immunization! Students have reported that there have been a surprising number of questions on immunization (including the topics of duration and convexity) on recent exams. The 5 practice exams in this manual contain very, very few questions on these topics. We suggest that you thoroughly review Sections 9c to 9n before you take the exam.

[4/28/10] Page 21, Q. 7. This problem should actually appear after Sections 1a(vi) to 1a(ix).

[7/17/11] Page 65, 3rd line from bottom, parenthetical remark. Should be “(e.g., when $(\delta)_t = .02t$, as in the above example).”

[7/17/11] Page 119, solution to Q. 5. The first line of the solution was omitted: $14,113 = 1,000(a\text{-angle-}4N)$ at 6.3%, $4N = 36$, $N = 9$.

[7/17/11] Page 119, solution to Q. 7, 2nd line. $R = 150.80$ (based on the number of decimal places used), not 150.08. The solution is based on the correct value.

[8/13/10] Page 136, solution to Q. 7. On the last line, the denominator should be $1 - .751315$. The answer is based on the correct denominator.

[8/13/10] Page 138, solution to Q. 19. The first line should say: “Using time **39** as the comparison date”. The solution is based on time 39.

[8/13/10] Page 223, solution to Q. 11. The way the question is worded, the correct answer is (A), not (B). As noted in the solution, the account balance at the end of the 8th year is \$46,921.66. Just after the 17th full scholarship of \$5,000 is awarded, the account balance is equal to $(46,921.66)(1.08)^{17} - 5,000(s\text{ angle }17)$ at 8% = \$4,859.86. According to the question, if there is less than \$5,000 in the account at the end of any year, the remaining amount (\$4,859.86) is immediately awarded as a smaller scholarship. Thus, only 17 full scholarships of \$5,000 are awarded. Note that the account balance of \$4,859.86 at the end of the 17th year would have grown to \$5,248.65 at the end of the 18th year at 8%. This would have permitted an 18th full scholarship to have been awarded, but this would not follow the requirements of the question.

[7/17/11] Page 302, first line under “b. Using the TVM registers”. 4,329.48 should be 4,329.38.

[7/17/11] Page 448, 8 lines from the bottom. Add the following sentence to the parenthesis: In fact, in “Notation and terminology used for Exam FM/Exam 2”, which you can find on www.BeAnActuary.org, the SOA/CAS says that, unless otherwise stated, “duration” means Macaulay duration.

[7/17/11] Page 450, solution to (c), 3rd line. The reference to footnote 2 should be to footnote 3.

[7/17/11] Page 462, footnote 5. Insert the following sentence just after the 2nd sentence of the footnote: In fact, in “Notation and terminology used for Exam FM/Exam 2”, which you can find on www.BeAnActuary.org, the SOA/CAS says that, unless otherwise stated, “convexity” means modified convexity.

- [7/17/11] Pages 488-489, “What about interest?” Note that the question of interest on the proceeds of a short sale is still not covered by the Study Notes. However, in a reply to an email sent by a student in 2010, the Education Staff noted that new exam questions will be based on McDonald, which assumes that this interest is paid. A number of questions on the 5 practice exams in this manual are based on the “no-interest” assumption. See the errata list below for pages 680 and subsequent.
- [7/17/11] Page 503, Fig. 11.2 and page 505, Fig. 11.3. The line showing the payoff on the long forward should intersect the y axis at -104, not -100.
- [7/17/11] Page 588, “The Asymmetric Butterfly Spread”, 2nd line of “Answer”. Should say “75% of the way from \$90 to \$110”.
- [7/17/11] Page 589, last line of “Memory Alert!”. The parenthesis should say: “(\$90 and \$110)”, not “(\$90 and \$100)”.
- [7/17/11] Page 615, table at the top. The first 4 entries in the column headed “Profit on 100-110 Collar” should end in .30, not .26 or .36. The next 3 entries in this column should end in .70, not .74. All of the entries in the “Combined Profit” column should end in .30, not .26.
- [4/28/10] Page 619, Q. 3. The problem should have made it clear that X and Y represent the highest and lowest profit, respectively, if the puts are *purchased*.
- [7/17/11] Page 648, the line just before Section 19d. The result of the calculation is \$7.55, not \$7.51.
- [7/17/11] Page 663. We suggest that you do Practice Exams 4 and 5 first, since most students think they are easier than Practice Exams 1 to 3.
- [4/28/10] Page 674, last 2 lines. 1035.45 should be 1030.45. The final answer of 10.36 is correct.
- [7/17/11] Page 680, Q.11, page 696, Q.7, page 712, Q. 23 and page 726, Q. 27. All of these questions should say that you should assume that no interest is paid to the short-seller on the proceeds of the short sale. Note that if this is not stated, you should assume that this interest *is* paid. (See pages 488-489, “What about interest?”)
- [7/17/11] Page 707, solution to Q. 34, 3rd equation. The number in the angle-bracket should be 282 (= 360 – 78), not 360. The result is based on the correct value.
- [4/28/10] Page 711, Q. 15. The put options in this problem are priced incorrectly, since the premiums should increase as the strike price increases. The solution is based on the premiums as shown.
- [7/17/11] Page 725, Q. 19. The question should ask for the non-zero value of X.
- [4/28/10] Page 725, Q. 20. The question should make it clear that the production cost of 17.50 is incurred at the time of sale, i.e., one year from now.
- [7/17/11] Page 726, Q. 23. The question should make it clear that the bond was originally purchased to yield a *minimum* of 8%. Also, it should say that the bond matures at par in 30 years.
- [8/13/10] Page 731, solution to Q. 17. On the last line, P should be equal to 122,215.3. The answer is still (D).

[7/17/11] Page 732, solution to Q. 23. To find the price at which the bond was originally purchased to yield a minimum of 8%, we must find the lowest price for all possible redemption dates. The price assuming maturity at par in 30 years, as shown in the solution, is \$943.711. If we assume that the bond is called at \$1,050 at the end of 6 to 29 years, the price would be greater than \$943.711. (This can be seen by looking at the premium/discount formula for the price, or by a couple of trial calculations.) Thus, the original price was \$943.711, as shown in the solution.