Flashcards

Learning & Memorizing Key Topics and Formulas

SOA Exam FM

Spring 2017 Edition

ACTEX a/s/m

Printed in the United States of America.

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In preparing for my exam I found this material: (Check one)

 ____Very Good ____Good ____Satisfactory ___Unsatisfactory

I found the following helpful:

_____
_____

I found the following problems:
(Please be specific as to section, specific item, and/or page number)

_____
_____

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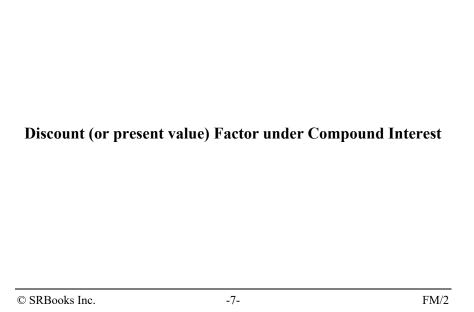You can also e-mail your comments to Support@ActexMadRiver.com.

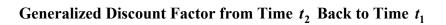**Accumulation Function under Compound Interest**

$$a(t) = (1+i)^t$$

Accumulation Function under Simple Interest

$$a(t) = 1 + it$$

Definition of Effective Rate of Interest for n^{th} Period

$$i_n = \frac{A(n) - A(n-1)}{A(n-1)}$$

 FM/2

Discount (or present value) Factor under Compound Interest

$$v^t = \left(\frac{1}{1+i}\right)^t = (1+i)^{-t}$$

Discount (or present value) Factor under Simple Interest

$$\frac{1}{1+it}$$

Generalized Discount Factor from Time t_2 Back to Time t_1

$$\frac{A(t_1)}{A(t_2)}$$

Generalized Discount Factor under Compound Interest

$$\frac{A(t_1)}{A(t_2)} = \frac{(1+i)^{t_1}}{(1+i)^{t_2}} = v^{t_2-t_1}$$

Generalized Discount Factor under Simple Interest

$$\frac{A(t_1)}{A(t_2)} = \frac{1+i \cdot t_1}{1+i \cdot t_2} \neq 1+i(t_2 - t_1)$$

Effective Rate, over $1/m$ of a Year, Equivalent to Nominal Annual Rate of $i^{(m)}$, Compounded m Times per Year

$$j = \frac{i^{(m)}}{m}$$

Definition of Effective Rate of Discount for n^{th} Period

$$d_n = \frac{A(n) - A(n-1)}{A(n)} = \frac{a(n) - a(n-1)}{a(n)}$$