## EDUCATION COMMITTEE OF THE SOCIETY OF ACTUARIES (SOA)

### INTRODUCTORY STUDY NOTE

EXAM SESSION:

#### FALL 2018

### EXAM: RETIREMENT PLAN INVESTMENT AND RISK MANAGEMENT

#### DATE & TIME: Tuesday, October 30, 2018; 2:00 p.m. – 4:15 p.m.

- 1. The examination will consist of two hours of written answer questions. A read-through time of 15 minutes will be given prior to the start of the exam. No writing is allowed during the read-through time.
- 2. The following link shows a recommended FSA module/exam sequence for each track: <u>http://www.soa.org/Education/Exam-Req/edu-new-fsa-recommended.aspx</u>

This order is NOT mandated. Each candidate will determine the appropriate sequence based on factors including readiness to sit for an exam, exam administration schedules, or study time available. However, the Education committees believe that these recommendations provide the most effective guide for candidate success. An examination/module may assume familiarity with material that is covered in any requirement that is recommended to come before that examination or module.

- 3. The Syllabus material includes textbooks, online readings, and the study notes listed in the Appendix. The Appendix also may contain additional important information regarding this exam. A complete listing of the Syllabus and Learning Objectives is located in this exam's home page on the SOA Web site.
- 4. Several book distributors carry some or all of the textbooks for the Society of Actuaries exams. A list appears on the SOA Web site: <u>http://www.soa.org/education/exam-req/resources/edu-txt-manuals.aspx</u>.
- 5. Any changes in the Syllabus for this exam will be published under "Updates" in this exam's home page on the SOA Web site.
- 6. Past exams, solutions and case studies are available at: <u>http://www.soa.org/education/exam-req/syllabus-study-materials/edu-multiple-choice-exam.aspx</u>
- 7. A case study will not be used for this exam.
- 8. The candidate should be very familiar with the Learning Objectives. These Learning Objectives are the first ingredient in developing the syllabus and also guide the examination committee when writing questions. The Learning Objectives set out the cognitive level needed to pass this exam. You will notice that the candidates are expected to "analyze," "explain," "calculate," "describe," "apply," etc. While studying the syllabus material, candidates may want to refer back to the Learning Objectives to remain focused on the goals of the exam.

- 9. The examination questions for this exam will be based on the required readings for this exam. If a conflict exists (in definitions, terminology, etc.) between the readings for this exam and the readings for other exams, the questions should be answered on the basis of the readings for this exam.
- 10. Candidates may ONLY use these battery or solar-powered Texas Instruments models: BA-35, BA II Plus\*, BAII Plus Professional\*, TI-30Xa, TI-30X II\* (IIS solar or IIB battery), and TI-30X MultiView\* (XS solar or XB battery). Candidates may use more than one of the approved calculators during the examination.

Calculator instructions may not be brought into the exam room. During the exam, the calculator must be removed from its carrying case so the supervisor can confirm that it is an approved model. Candidates using a calculator other than the approved models will have their exams disqualified.

Candidates can purchase calculators directly from: Texas Instruments, Attn: Order Entry, PO Box 650311, Mail Station 3962, Dallas, TX 75265, phone 800/842-2737 or <u>http://epsstore.ti.com</u>.

\*The memory of the **BA II Plus, BA II Plus Professional, TI-30X II** and **TI-30X MultiView** calculators will need to be cleared by the examination supervisor upon the candidate's entrance to the examination room.

11. A list of various seminars/workshops and study manuals appears on the SOA Web site <u>http://www.soa.org/education/exam-req/resources/edu-sem-workshops.aspx</u> and <u>http://www.soa.org/education/exam-req/resources/edu-txt-manuals.aspx</u>. These seminars/workshops and study manuals do not reflect any official interpretation, opinion, or endorsement of the Society of Actuaries or its Education Committee.

Please note that the Education Committee expects candidates to read the material cited in the *Syllabus* and to use other material as a complement to the primary sources rather than a substitution for them.

12. The Society of Actuaries provides study notes to persons preparing for this examination. They are intended to acquaint candidates with some of the theoretical and practical considerations involved in the various subjects. While varying opinions are presented where appropriate, limits on the length of the material and other considerations sometimes prevent the inclusion of all possible opinions. These study notes do not, however, represent any official opinion, interpretation or endorsement of the Society of Actuaries. The Society is grateful to the authors for their contributions in preparing study notes.

The American Academy of Actuaries, the Canadian Institute of Actuaries, the Conference of Consulting Actuaries, and the Society of Actuaries jointly sponsor various examinations administered by the Society of Actuaries.

# APPENDIX

Study notes for this exam

Code	Title
RPIRM-102-13	Equities in DB Plans – Is the Traditional 60/40 Mix a Dinosaur?
RPIRM-103-15	Fiduciary Liability Issues for Selection of Investments
RPIRM-104-15	Chapter 12, Sections 1-7 of Managing Investment Portfolios, Third Edition
RPIRM-107-13	Reflections on the Efficient Market Hypotheses: 30 Years Later
RPIRM-108-13	Introduction and Overview of Retirement Plan Investments
RPIRM-110-13	Plan Sponsor Guide to Liability –Driven Investing
RPIRM-111-13	Mind the Gap: Using Derivatives Overlays to Hedge Pension Duration
RPIRM-112-13	Asset/Liability Modeling and Asset Allocation for Pension Plans
RPIRM-115-13	Pensions in the Public Sector, Ch. 9
RPIRM-116-13	Financial Economics and Actuarial Practice
RPIRM-120-13	The Case Against Stock in Public Pension Plans
RPIRM-121-13	The Case for Stock in Pension Funds
RPIRM-123-13	Risk Management and Public Plan Retirement Systems - (appendix background only)
RPIRM-124-13	Bader and Gold's Rebuttal to The Case for Stock in Pension Funds
RPIRM-128-13	The Impact of the Financial Crisis on Defined Benefit Plans and the Need for Counter-Cyclical Funding Regulations
RPIRM-132-14	CAPSA Guideline No. 6, Pension Plan Prudent Investment Practices Guideline
RPIRM-133-14	CAPSA Guideline No. 7, Pension Plan Funding Policy Guideline
RPIRM-134-14	Liability-Responsive Asset Allocation
RPIRM-136-15	Longevity Risk Management: New Tools for Defined-Benefit Pension Plans
RPIRM-138-16	Buy-in Annuities for Defined Benefit Plans
RPIRM-139-16	Prudent Investment Practices for Derivatives
RPIRM-140-16	OSFI–Longevity Insurance and Longevity Swaps
RPIRM-141-16	Chapter 9 of Recreating Sustainable Retirement: Resilience, Solvency, and Tail Risk

Code	Title
	Attracting Pension Plan Assets—What Alternative Investment Managers Need to Know
RPIRM-144-17	Patient Capital, Private Opportunity: the Benefits and Challenges of Illiquid Alternatives
RPIRM-145-17	An Introduction to Infrastructure as an Asset Class
RPIRM-146-17	The Pension Risk Transfer Market at \$260 Billion
RPIRM-147-17	Charting the Course: A Framework to Evaluate Pension De-Risking Strategies
RPIRM-148-17	Key Rate Durations: Measures of Interest Rate Risks
RPIRM-149-17	Practical De-Risking Solutions: Asset Duration and Interest Rate Risk
RPIRM-150-17	De-Risking in a Low-Interest-Rate Environment
RPIRM-151-18*	Designing the Future of the Target-Date Funds
	Pension Plan Immunization Strategies: How Close Can You Get?
RPIRM-153-18*	Strengthening the Security of Public Sector Defined Benefit Plans, Executive Summary
	Benefit Security Pension Fund Guarantee Schemes
RPIRM-155-18*	CAPSA Guideline No. 4: Pension Plan Governance Guideline and Frequently Asked Questions
RPIRM-156-18*	Practical De-Risking Solutions: Low Volatility Equity Strategies