

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

### INTRODUCTORY STUDY NOTE

**EXAM SESSION:** SPRING 2017

**EXAM:** INDIVIDUAL LIFE AND ANNUITIES—LIFE RISK MANAGEMENT

**DATE & TIME:** Friday, April 28, 2017; 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:  
<http://www.soa.org/Education/Exam-Req/edu-new-fsa-recommended.aspx>

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. Study notes listed with an asterisk (\*) will also be included in the Revision set of study notes. 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: <http://www.soa.org/education/exam-req/resources/edu-txt-manuals.aspx>.
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: <http://www.soa.org/education/exam-req/syllabus-study-materials/edu-multiple-choice-exam.aspx>
7. A case study will be used as a basis for some questions on the examination. Be sure to answer the questions asked by referring to the case study. For example, if asked for advantages of a particular plan design to a company referenced in the case study, limit your response to the specifics for that company. Other advantages should not be listed as they are extraneous to the question and will result in no additional credit. Further, if they conflict with the applicable advantages, no credit will be given. Candidates are advised to familiarize themselves with the case study. A copy will be included in the examination booklet. Candidates will not be allowed to bring their study note copy of the case study into the examination room.

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, ph800/842-2737 or <http://epsstore.ti.com>.

*\*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 <http://www.soa.org/education/exam-req/resources/edu-sem-workshops.aspx> and <http://www.soa.org/education/exam-req/resources/edu-txt-manuals.aspx>. These seminars/workshops and study manuals do not reflect any official interpretation, opinion, or endorsement of the Society of Actuaries or its Education Committee.
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
LRM-100-14	Theory of Risk Capital in Financial Firms
LRM-104-14	Rethinking Risk Management
LRM-105-14	Mapping of Life Insurance Risks
LRM-106-14	Moody's Looks at Risk Management & The New Life Insurance Risks
LRM-108-14	Study Note on Parameter Risk
LRM-111-14	Value-at-Risk: Evolution, Deficiencies and Alternatives
LRM-112-14	OSFI Guideline E-18: Stress Testing
LRM-114-14	Asset-Liability Management for Insurers
LRM-116-14	Life Insurance Forecasting and Liability Models: An Examination of the Trade-Offs Involved with Certain Modeling Decisions
LRM-117-14	Key Rate Durations: Measures of Interest Rate Risks
LRM-118-14	Revisiting the Role of Insurance Company ALM Within a Risk Management Framework
LRM-119-14	Chapter 13 of <i>Valuation of Life Insurance Liabilities</i> , Fourth Edition
LRM-120-14	Chapter 14, Section 14.4 of <i>Life Insurance Products and Finance</i>
LRM-121-14	Value at Risk: Uses and Abuses
LRM-123-15	Enterprise Risk Management
LRM-124-15	All on the Same train, but Heading in Different Directions
LRM-125-15	Chapter 1 of <i>Financial Enterprise Risk Management</i>
LRM-126-15	Chapter 17 of <i>Financial Institutions Management: A Risk Management Approach</i> , 6 <sup>th</sup> Edition
LRM-127-15	Chapter 2, pp. 19–32 of <i>Measuring Market Risk</i> , 2 <sup>nd</sup> Edition
LRM-128-15	A Short, Comprehensive, Practical Guide to Copulas
LRM-129-15	Stress Testing: A Robust End-to-End Approach
LRM-130-15	Diversification: Consideration on Modelling Aspects & Related Fungibility and Transferability