

# EDUCATION COMMITTEE OF THE SOCIETY OF ACTUARIES (SOA)

## INTRODUCTORY STUDY NOTE

**EXAM SESSION:** SPRING 2018

**EXAM:** RETIREMENT BENEFITS—DESIGN AND ACCOUNTING, U.S.

**DATE & TIME:** Thursday, April 26, 2018; 8:30 a.m. – 11:45 a.m. and 1:30 p.m. – 3:45 p.m.

1. The examination will consist of five hours of written answer questions. A read-through time will be given prior to the start of the exam, 15 minutes in the morning session and 15 minutes in the afternoon session. 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, phone 800/842-2737 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-reg/resources/edu-sem-workshops.aspx> and <http://www.soa.org/education/exam-reg/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.

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
DA-100-13	Issues for Implementing Phased Retirement in Defined Benefit Plans
DA-101-13	Legal and Research Summary Sheet: Phased Retirement
DA-102-13	Evaluating the Design of Private Pension Plans: Costs and Benefits of Risk-Sharing
DA-103-13	Risk Allocation in Retirement Plans: A Better Solution
DA-104-13	Deferred Retirement Option Plans (“DROP” Plans)
DA-105-13	Measuring Terminable Postretirement Obligations
DA-107-13	Green DB: Eliminate Wasteful Practices and Make Your DB Plan Sustainable
DA-110-13	Integration with Social Security
DA-112-13	Converting Pension Plans from a Defined Benefit to a Defined Contribution Design—Issues to Consider in Canada
DA-114-13	Risk Management and Public Plan Retirement Systems
DA-115-13	Private Pensions: Alternative Approaches Could Address Retirement Risks Faced by Workers but Pose Trade-offs
DA-123-13	Replacement Ratio Study: A Measurement Tool for Retirement Planning
DA-125-13	Should Variable Pay Count Toward Benefits Calculations?
DA-127-13	The Economics of State and Local Pensions
DA-130-13	International (Offshore) Pension Plans: A Growing Trend
DA-132-13	Chapters 1, pp. 4-11 and 5 of <i>Pension Policy: The Search for Better Solutions</i>
DA-133-13	Chapter 34 of <i>The Handbook of Employee Benefits: Health and Group Benefits</i> , Seventh Edition
DA-135-13	Chapter 15 of <i>The Handbook of Executive Benefits</i>
DA-136-17	Selection of Actuarial Assumptions
DA-137-13	Pension Projections
DA-138-13	Discounting State and Local Pension Liabilities
DA-139-15	ASOP 35: Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations

Code	Title
DA-140-15	ASOP 27: Selection of Economic Assumptions for Measuring Pension Obligations
DA-142-15	ASOP 4: Measuring Pension Obligations and Determining Pension Plan Costs or Contributions
DA-145-13	Acquiring a U.S. Operation: A Primer
DA-146-15	ASOP 6: Measuring Retiree Group Benefit Obligations and Determining Retiree Group Benefits Program Periodic Costs or Actuarially Determined Contributions
DA-147-13	Intricately Linked: Pensions and Corporate Financial Performance
DA-148-13	Mergers & Acquisitions: Due Diligence of Retirement Plans
DA-154-15	Implementing Early Retirement Incentive Programs: A Step-By-Step Guide
DA-156-15	Moving From a DB Executive Retirement Plan to a DC Executive Retirement Plan
DA-157-18*	Chapter 12 of <i>PWC Manual of Accounting IFRS 2017</i>
DA-158-15	New Brunswick's New Shared Risk Pension Plan
DA-159-16	The OECD Roadmap for the Good Design of Defined Contribution Pension Plans
DA-160-18*	OECD Pensions Outlook 2016, Highlights
DA-161-16	Pension Issues in Mergers and Acquisitions
DA-162-16	Selecting and Documenting Mortality Assumptions for Pensions
DA-164-17	Defined Contribution Plan Success Factors
DA-165-17	Phased Retirement—An Important Part of the Evolving Retirement Scene
DA-166-17	Shifting Public Sector DB Plans to DC: The Experience so Far and Implications for Canada
DA-167-17	ASOP 25: Credibility Procedures
DA-168-17	IFRS and US GAAP: Similarities and Differences (Chapter 5)
DA-169-17	Mergers and Acquisitions: Key Considerations for Retirement Plan Conversion
DA-170-17	Accounting for Buy-Ins
DA-171-17	Exposure Draft: Selecting Investment Return Assumptions Based on Anticipated Future Experience
DA-172-18*	Chapter 12 of <i>Reimagining Pensions: The Next 40 Years</i>
DA-173-18*	How Accurately Does 70% Final Employment Earnings Replacement Measure Retirement Income (In)Adequacy? Introducing the Living Standards Replacement Rate (LSRR)

Code	Title
DA-174-18*	An Improved Application of the Variable Annuity
DA-175-18*	AAA Issue Brief: Alternatives for Pension Cost Recognition Implementation Approaches Using Bond Models
DA-176-18*	Expected Return
DA-177-18*	Fixed Income–Methodology Overview
DA-178-18*	Equity–Methodology Overview
DA-179-18*	International Financial Reporting Standards
DA-180-18*	Accounting For Pension Buy-In Arrangements
DA-802-13	Internal Revenue Code 409A and Non-Qualified Plan Design Considerations
DA-803-13	Evaluating Financing Options for Nonqualified Benefit Plans
DA-804-18*	FASB Accounting Standards Codification Topic 715
DA-805-18*	ASOP 23: Data Quality
DA-806-18*	ASOP 21: Responding to or Assisting Auditors or Examiners in Connection with Financial Audits, Financial Review, and Financial Examinations
DA-807-13	ASOP 44: Selection of Use of Asset Valuation Methods for Pension Valuations
DA-808-17	ASOP 34: Actuarial Practice Concerning Retirement Plan Benefits in Domestic Relations Actions
DA-809-13	ASOP 41: Actuarial Communications
DA-811-15	Gearing up to Comply with GASB’s New Accounting Standards for Public Sector Pension Plans and Sponsoring Employers
DA-812-15	State and Local Pension Costs: Pre-Crisis, Post-Crisis, and Post-Reform
DA-813-16	Freezing Defined Benefit Plans
DA-814-16	Accounting for Plan Splits & Plan Mergers Under U.S. GAAP
DA-815-17	Strategic Moves: The Exchange Option for Retirees
DA-816-17	Accounting for Pension Buy-In Arrangements
DA-817-18*	Savings Medicare Beneficiaries Need for Health Expenses: Some Couples Could Need as Much as \$350,000
DA-818-18*	Financial Reporting Considerations Related to Pension and Other Postretirement Benefits
DA-819-18*	The Funding of State and Local Pensions: 2015-2020
DA-820-18*	Multiemployer Plans

The following additional information applies to this exam:

Study Note DA-804-18: The Glossary sections (715-XX-20) and the Implementation Guidance and Illustrations sections (715-XX-55) are not included in this study note. These sections are background only readings and can be downloaded for free by registering for the Basic View on FASB Accounting Standards Codification website: <https://asc.fasb.org/home>.

Study Note DA-132-13: This study notes is included to illustrate alternative plan design concepts, not country specific details. Candidate is expected to apply the concepts, not the country specific details.

Paper entitled "What's Wrong with ASOP 27? Bad Measures, Bad Decisions": This paper makes reference to an older version of ASOP 27 than the version included in the syllabus. However, according to the paper's authors, most of the concepts discussed in this paper remain valid notwithstanding the updates to ASOP.