Important Information

The examination for this course will be given on Friday, May 9th, from 8:30am to 1:15pm and will consist of four and a half hours of written-answer questions. A read-through time will be given prior to the start of the exam—15 minutes. Information regarding registering for exams is available on the Exam Registration page.

For Spring 2008, this exam includes a case study for the examination. The case study will be distributed in the Study Note package. **Candidates will not be allowed to bring their copy of the case study into the examination room.**

Study notes are part of the required Course of Reading and are not available electronically. Candidates must order the study notes from the Society of Actuaries using the <u>Study Note Order Form</u>. Past exams are available on the Exam Archives page of the SOA web site under <u>Multiple Choice/Essay</u> Examinations.

Candidates should be sure to check the <u>Updates</u> page of the web site periodically for additional corrections or notices.

The candidate should be very familiar with the Learning Objectives as described in the Basic Education Catalog. 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.

Exam	Retirement CSP-C

Learning Objectives

1. The candidate will be able to analyze the risks faced by retirees and the participants of a defined benefit or defined contribution retirement plan, as well as retiree health plans.

Learning Outcomes

The candidate will be able to:

- a) Identify risks faced by retirees and the elderly
- b) Propose ways in which retirement plans can manage the range of risks faced by retirees
- c) Describe the risks faced by participants of a government sponsored retirement plan
- d) Describe the risks faced by participants of single employer sponsored retirement plans
- e) Describe the risks faced by participants of a multiemployer retirement plan
- f) Evaluate benefit adequacy for members of a particular plan given other sources of retirement income
- g) Construct a model for measuring replacement income adequacy under different scenarios

Syllabus Resources

• Allen, *Pension Planning, Profit Sharing, and Other Deferred Compensation Plans*, Ninth Edition, 2003, Chapter 1, pp. 2-8 "Economic Problems of Old Age, OR,

Allen, Retirement Plans – 401 (k)s, IRAs and Other Deferred Compensation Approaches, Tenth Edition, 2007, Chapter 1 pp 3-8, "Economic Problems of Old Age"

- McGill, Fundamentals of Private Pensions, Eighth Edition, 2005, Chapter 14, Chapter 16, pp. 427-441
- Mitchell and Hustead Pensions in the Public Sector, 2001, Chapter 1, Chapter 4 (pp. 98-101 only), Chapter 12
- Morneau Sobeco, Handbook of Canadian Pension and Benefit Plans, Thirteenth Edition, 2005, Chapter 1 pp 22-23
- R-C100-07, Murciano, "Living in Retirement—Are Your Employees Really Ready?" Employee Benefit Plan Review, Dec 2003
- R-C101-07, Slater, "Seven Steps Toward Creating a Standout Retirement Savings Plan," Employee Benefit Plan Review, Sep 2005,
- R-C102-07, Private Pension Policies in Industrialized Countries, Turner & Watanabe, 1999, Chapter 5, pp 65-81
- R-C104-07 Replacement Ratio Study A Measurement Tool for Retirement Planning
- R-C123-07 Funding Risks for Multi-Employer Plans
- Post Retirement Risks Chart, SOA, http://www.soa.org/files/pdf/post-retirement-charts.pdf
- "Gradual Retirement: An Additional Option in Work and Retirement" by Yung-Ping Chen and John C. Scott from "Retirement Implications of Demographic and Family Change" symposium at the Spring '02 San Francisco SOA meeting,
- "Protecting Participants and Beneficiaries in a Phased Retirement World" by Patricia L. Scahill and Jonathan Barry Forman, from "Retirement Implications of Demographic and Family Change" symposium at the Spring '02 San Francisco SOA meeting,

Exam

Learning Objectives

2. The candidate will be able to evaluate sponsor's goals for the retirement plan

Context:

Sponsor is the entity establishing the plan and operates in private sector, public sector, tax-exempt, and multiemployer environment

Retirement plans include qualified/registered, supplemental and deferred compensation retirement plans and retiree health plans

Learning Outcomes

The candidate will be able to:

- a) Describe the agency relationship between management of the sponsor and its shareholders or taxpayers
- b) Compare the, sometimes conflicting, interests of management, employees, shareholders or taxpayers (in the case of public sector)

- c) Describe ways to identify and prioritize the sponsor's goals related to the design of the retirement plan
- d) Given a context, assess the feasibility of achieving the sponsor's goals for their retirement plan
- e) Given a context, assess the tradeoffs between different goals and prioritize them
- f) State relationship or recognize contradictions between management's and shareholders' goals and the retirement risks faced by retirees
- g) Assess the appropriateness of the retirement plan features in relation to the sponsor's total compensation structure
- h) Assess how retirement plan features create shareholder value

- Allen, Pension Planning, Profit Sharing, and Other Deferred Compensation Plans, Ninth Edition, 2003, Chapter 1, pp. 9-10 ("Increased Productivity"), OR
 Allen, Petingment Plans, 401(h)s, IPAs and Other Deferred Compensation Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, 401(h)s, IPAs and Other Deferred Compensation Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, Approaches, Tenth Edition, 2007, Chapter 1, pp. 9-10 ("Increased Plans, Approaches, Approaches,
 - Allen, Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches, Tenth Edition, 2007, Chapter 1, pp 9-10 ("Increased Productivity")
- Allen, *Pension Planning, Profit Sharing, and Other Deferred Compensation Plans*, Ninth Edition, 2003, Chapter 2, pp. 32-43 ("Employer Objectives"), OR
 - Allen, Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches, Tenth Edition, 2007, Chapter 2, pp. 34-45 ("Employer Objectives")
- Allen, *Pension Planning, Profit Sharing, and Other Deferred Compensation Plans*, Ninth Edition, 2003, Chapter 2, pp. 26-32 ("Environmental Considerations", "Employer Philosophy and Attitudes"), OR Allen, *Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches*, Tenth Edition, 2007, Chapter 2 pp. 28-33 ("Environmental Considerations," "Employer Philosophy and Attitudes")
- McGill, Fundamentals of Private Pensions, Eighth Edition, 2005, Chapters 1, 14, 18
- Morneau Sobeco, Handbook of Canadian Pension and Benefit Plans, Thirteenth Edition, 2005, Chapter 1
- R-C102-07, Turner & Watanabe, *Private Pensions Policies in Industrialized Countries*, 1999, Chapter 5, "Pension Risk and Insurance," pp 65-81
- R-C105-07, "Pension Actuary's Guide to Financial Economics"
- R-C106-07, The Case Against Stock in Public Pension Plans Bader, Gold, 2004
- Session 19 Seminar, "Identifying Risks Inherent in Retirement Plans," SOA Record, Vol 31, No. 2, http://www.soa.org/library/proceedings/record-of-the-society-of-actuaries/2000-09/2005/june/rsa05v31n219sem.pdf
- "Key Findings and Issues: How Americans Understand and Manage their Retirement Risks" 2005 Risks and Process of Retirement Survey Report, April 2006
- Exley & Mehta "Pension Funds: Company Manager's View", http://www.soa.org/library/unclassified/m-rs04-1-01.pdf
- Retirement Benefits, Economics and Accounting: Moral Hazard and Frail Benefit Designs by Jeremy Gold, NAAJ 1/05, http://www.soa.org/library/journals/north-american-actuarial-journal/2005/january/naaj0501-6.pdf

Exam

Learning Objectives

3. The candidate will be able to evaluate risks faced by sponsors of a retirement plan by virtue of the plan's design and be aware of methods to mitigate these risks.

Context:

Sponsor is the entity establishing the plan and operates in private sector, public sector, tax-exempt, and multiemployer environment

Retirement plans include qualified/registered, supplemental and deferred compensation retirement plans as well as retiree health plans

Learning Outcomes

The candidate will be able to:

- a) Identify how plan feature, temporary or permanent, can adversely affect the plan sponsor. For example -An early retirement window offering or a lump sum payout option
- b) Recommend ways to mitigate the risks identified with particular plan feature [e.g., cap an open-ended COLA]
- c) Analyze the issues related to plan provisions that cannot be removed
- d) Describe plan design features to handle the changes in the demographics of the labor force
- e) Compare the economic value of different plan designs for different stakeholders
- f) In a given context, assess the effect that changes in plan design might have on collectively bargained agreements
- g) Assess the impact of possible changes in plan design legislation

- Allen, *Pension Planning, Profit Sharing, and Other Deferred Compensation Plans*, Ninth Edition, 2003, Chapter 13, pp. 237-242, OR Allen, *Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches*, Tenth Edition, 2007, Chapter 17, pp.313-319
- Allen, Pension Planning, Profit Sharing, and Other Deferred Compensation Plans, Ninth Edition, 2003, Chapter 3, pp. 52-55, "Legislative Factors" and "Other [Legislative] Factors", OR
 - Allen, *Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches*, Tenth Edition Chapter 3, pp 53-57, "Legislative Factors" and "Other [Legislative] Factors"
- McGill, Fundamentals of Private Pensions, Eighth Edition, 2005, Chapter 18
- Morneau Sobeco, Handbook of Canadian Pension and Benefit Plans, Thirteenth Edition, 2005, Chapters 1, 2, 11 (background only), 15
- "Addressing the Financial Risks from Retirement Systems: Identifying Risks Inherent in Retirement Plans", RSA 31, No. 2

- R-C102-07, Turner & Watanabe, Private Pension Policies in Industrialized Countries, 1999, Chapter 5, pp 65-81
- R-C107-07, Cassidy, "Equities in DB Plans Is the Traditional 60/40 Mix a Dinosaur?", Employee Benefit Plan Review, Sep 2005, pp. 30-33
- R-C108-07, Center for Retirement Research at Boston College March 2006 Bulletin Why are Healthy Employers Freezing their Pensions?
- R-C123-07, Funding Risks for Multi-Employer Pension Plans
- R-C800-07, Airline Plans' Underfunding Illustrates Broader Problems with the Defined Benefit Pension System
- RSA 95, Vol. 21 No. 3A"Downsizing and Plan Design
- *Pension Forum* Dec. 1, 2000, "Actuarial Aspects of Cash Balance Plans" (sections 1,2,3,5, plus Appendix A for reference), http://www.soa.org/library/newsletters/pension-forum/2000/december/pfn0012.pdf
- SOA Record, Vol 31, No. 2, New Orleans Meeting June 2005 session 56: Plan Design, http://www.soa.org/library/proceedings/record-of-the-society-of-actuaries/2000-09/2005/june/rsa05v31n256sem.pdf
- "Gradual Retirement: An Additional Option in Work and Retirement" by Yung-Ping Chen and John C. Scott
- "Protecting Participants and Beneficiaries in a Phased Retirement World" by Patricia L. Scahill and Jonathan Barry Forman,

Exam

Learning Objectives

4. The candidate will be able to evaluate and recommend a plan design appropriate for the sponsor's goals.

Context:

These recommendations will be appropriate for the sponsor's business and financial environment, workforce objectives and other HR programs. This would incorporate, for example, application of the sponsor's general industry, philosophy, labor force objectives, financial situation/objectives and total compensation objectives.

These recommendations will be appropriate for a particular employee group including, salaried, hourly, unionized and executive employees.

Learning Outcomes

The candidate will be able to:

- a) Given a context, design retirement programs that manage retirement risk and are consistent with sponsor objectives
- b) Given a context, design retirement programs that promote employee behavior consistent with sponsor objectives
- c) Given a context and sponsor objectives, recommend an appropriate plan type for providing retirement benefits and defend the recommendations
- d) Given a context and sponsor objectives, evaluate the pros and cons from both a sponsor and employee perspective of introducing options allowing for flexible retirement such as phased retirement, DROPs and flexible pension plans
- e) Given a context and plan type, recommend appropriate plan design/features and defend the recommendations
- f) Identify the ways that regulation impacts the sponsor's plan design goals

- g) Recommend a method to integrate government-provided benefits with retirement plan designs in order to meet the plan sponsor's particular goals and defend the recommendation
- h) Given a context and sponsor objectives, advise a plan sponsor regarding the choice of design elements for their retiree health program

- Allen, *Pension Planning, Profit Sharing, and Other Deferred Compensation Plans*, Ninth Edition, 2003, Chapter 2, pp. 36-37, "Compliance with Legal Requirements" OR
 - Allen, Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches, Tenth Edition, 2007, Chapter 2, pp 37-39 "Compliance with Legal Requirements"
- Allen, Pension Planning, Profit Sharing, and Other Deferred Compensation Plans, Ninth Edition, 2003, Chapter 3, OR
 Allen, Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches, Tenth Edition, 2007, Chapter 3
- McGill, Fundamentals of Private Pensions, Eighth Edition, 2005, Chapter 14
- Morneau Sobeco, Handbook of Canadian Pension and Benefit Plans, Thirteenth Edition, 2005, Chapters 1 and 2
- Yamamoto, Fundamentals of Retiree Group Benefits, 2006, Chapter 4, pp. 57-68 and pp. 90-112
- R-C101-07, Seven Steps Toward Creating a Standout Retirement Savings Plan, Slater, Employee Benefit Plan Review, Sep 2005
- R-C108-07, Why Healthy Employers Freeze Their Pension Plans
- R-C109-07 (Formerly 8RU-116-01) Integration With Social Security
- R-C123-07 Funding Risks for Multi-Employer Pension Plans
- "Gradual Retirement: An Additional Option in Work and Retirement" by Yung-Ping Chen and John C. Scot
- "Protecting Participants and Beneficiaries in a Phased Retirement World" by Patricia L. Scahill and Jonathan Barry Forman,

Exam

Learning Objectives

5. The candidate will be able to synthesize and evaluate deferred compensation and supplemental retirement plans for the highly paid in a given context.

Learning Outcomes

The candidate will be able to, for a deferred compensation or supplemental executive retirement plan:

- a) Differentiate between situation where management and shareholders objectives for executive plans coincide and where they differ
- b) Given a context, recommend a plan to meet the sponsor's objectives and defend the recommendation
- c) Given a context, assess the plan from an executive's perspective
- d) Analyze the options for securing the benefit promise
- e) Assess the taxation issues
- f) Identify and assess the impact of regulatory constraints
- g) Describe accounting for these plans and the options available

- Allen, *Pension Planning, Profit Sharing, and Other Deferred Compensation Plans*, Ninth Edition, 2003, Chapter 20, pp. 362-364, 367-368, 377-378, OR
 - Allen, Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches, Tenth Edition, 2007, Chapter 14, pp. 245-247, 250-251, and 260
- R-C801-07, Evaluat ing Financing Options for Nonqualified Benefit Plans", Clary and Hauptman, Employee Benefit Plan Review, Jan 2004

Exam

Learning Objectives

6. The candidate will be able to understand the general applicability and design of long-term incentive plans

Learning Outcomes

- a) The candidate will be able to identify and describe the design of long-term incentive plans, including:
 - Bonus/performance plans
 - Stock options
- b) The candidate will be able to summarize the accounting treatment of these plans

- Allen, *Pension Planning, Profit Sharing, and Other Deferred Compensation Plans*, Ninth Edition, 2003 Chapter 20 and 21, OR Allen, *Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches*, Tenth Edition, 2007, Chapter 14 and 15
- R-C110-07, Towers Perrin, The Handbook of Executive Benefits, Chapter 15 (Golden Parachutes) pp. 238-244 only
- R-C124-07, Recent Issues in Corporate Financial Reporting, PWC Financial Reporting Release, Feb. 2005 Appendix only
- R-C802-07, Executive Compensation and Benefits, 2004 CCA meeting session 12, pp 560-566 only
- R-C803-07, Executive Compensation 2005: Many Forces, One Direction, Poerio and Keller, Compensation & Benefits Review, May/June 2005
- R-C804-07, The Brave New World of Equity-Based Compensation Post-409A, Larson & Schermerhorn, Compensation & Benefits Review, May/June 2005
- R-C805-07, Taking Stock of Option Expensing, Bowen and Perry, Contingencies, Jan/Feb 06, pp 40-42

Exam

Learning Objectives

7. The candidate will be able to evaluate the sponsors financial goals and risk management with respect to their plan

Learning Outcomes

The candidate will be able to:

- a) Describe ways to work with the sponsor on identifying and prioritizing the goals of management and shareholders related to the financial management of their retirement plan
- b) Compare the, sometimes conflicting, interests of management, employees, shareholders or taxpayers (in the case of public sector)
- c) Define the retirement plan risks (financial and design) in a way that integrates with the sponsor's risk management strategy
- d) Analyze how the retirement plan integrates into the sponsor's overall financial position
- e) Describe how retirement plan accounting impacts the sponsor's overall financial results
- f) Demonstrate how the retirement plan's cash inflows and outflows can affect the plan sponsor
- g) Recommend an appropriate funding policy in line with sponsor goals and professional standards. The candidate will be able to defend the recommendations
- h) Describe how a plan's funded status can impact union negotiations and multiemployer plans

- Allen, *Pension Planning, Profit Sharing, and Other Deferred Compensation Plans*, Ninth Edition, 2003, Chapters 22 and 23 Allen, *Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches*, Tenth Edition, 2007, Chapters 24 and 29
- Mitchell/Hustead, Pensions in the Public Sector, Chapter 9
- Morneau Sobeco, Handbook of Canadian Pension and Benefit Plans, Thirteenth Edition, 2005, Chapters 5 and 6
- R-C105-07, Pension Actuary's Guide to Financial Economics
- R-C108-07 Why are Healthy Employers Freezing Their Pension Plans
- R-C111-07, Pensions and Endowments Ten: The Optimal Asset Allocation Under Proposed Pension Law, Latter (pp. 1-8 ONLY)
- R-C112-07 (Formerly 8RU-306-03), Pension Investment and Corporate Risk Management
- R-C113-07, Yikes! How to Think About Risk, Munnell
- R-C114-07, A Fresh Look at Pension Risks, MercerHR.com
- R-C116-07, Financing the Future: How Fit is Your Funding Policy?, Mercer
- R-C117-07, Pension Deficits: An Unnecessary Evil, Bader

- R-C123-07, Funding Risks for Multi-Employer Pension Plans
- R-C125-07, Towers-Perrin, Pensions and Corporate Financial Performance
- R-C126-07, Bank of Canada Review Summer 2005 Recent Trend in Canadian DB Pension Sector Investment and Risk Management
- R-C127-07 (Formerly 8RU-210-03) —Controlling the FAS 87 Balance Sheet Impact by Integrating Funding Expensing and Asset Policies
- R-C128-07, Turner/Watanabe, Private Pension Policies in Industrialized Countries, Chapter 6
- R-C129-07 (Formerly 8RU-201-00), Symposium on Pension Funding
- R-C134-07, Maginn and Tuttle, Managing Investment Portfolios, Third Edition, Chapter 3, pp. 63-85
- Session 19 Seminar, "Identifying Risks Inherent in Retirement Plans," SOA Record, Vol 31, No. 2, http://www.soa.org/library/proceedings/record-of-the-society-of-actuaries/2000-09/2005/june/rsa05v31n256sem.pdf
- Exley "Pension Funds and the UK Economy", http://www.soa.org/library/monographs/retirement-systems/the-great-controversy/2004/june/m-rs04-1-16.pdf
- Gold "Accounting /Actuarial Bias Enables Equity Investment by Defined Benefit Pension Plans" July 2005 NAAJ, http://www.soa.org/library/journals/north-american-actuarial-journal/2005/july/naaj0903-1.pdf
- "Financial Economics and Actuarial Practice", Tony Day, NAAJ July 2004, http://www.soa.org/library/journals/north-american-actuarial-journal/2004/july/naaj0403-6.pdf
- The Earnings Implications of Pension Expense: A Stochastic Analysis of Ten Canadian Companies (Joss) NAAJ October 2005, http://www.soa.org/library/journals/north-american-actuarial-journal/2005/october/naaj0504-3.pdf
- "Improving Pension Funding and Disclosures: What's in it for Me?" by Stonewall& Moore from the July 2005 Funding Symposium, http://www.soa.org/library/monographs/retirement-systems/the-future-of-pension-plan-funding-and-disclosure-monograph/2005/december/mrs05-1-vii.pdf

Exam

Learning Objectives

8. The candidate will be able to recommend and advise on the financial effects of funding policy and accounting in line with the sponsors goals, given constraints

Context:

Private, industry, multiemployer, public, multinational companies

Learning Outcomes

The candidate will be able to:

- a) Compare the financial economics perspective to the traditional perspective on funding and accounting for retirement plans
- b) Recommend an appropriate funding method and asset valuation method in line with the sponsor's investment policy and funding goals. The candidate will be able to defend the recommendation.
- c) Advise retirement plan sponsors on funding costs including tax deductibility, required contributions and other alternatives to meet the sponsor's goals. This would be consistent with government regulation.
- d) Advise plan sponsors on accounting costs and disclosures for their retirement plans. This would include restrictions imposed by applicable accounting authorities (FASB, CICA, IASC, FRS17)
- e) From a financial economics perspective, describe differences in economic value on the basis of the financial strength of the sponsoring company
- f) Perform valuations for the following special purposes, and advise plan sponsors on their financial implications
 - i. Plan Mergers and Acquisitions
 - ii. Spin-offs
 - iii. Conversions from one plan type to another
- g) Perform and interpret the results of projections for short and long range planning including the effect of proposed plan changes

- Allen, *Pension Planning, Profit Sharing, and Other Deferred Compensation Plans*, Ninth Edition, 2003, Chapter 15, pp. 259-272, OR Allen, *Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches*, Tenth Edition, 2007, Chapter 19, Budgeting Pension Costs," pp. 335-341
- McGill, Fundamentals of Private Pensions, Eighth Edition, 2005, Chapter 7, Chapter 8 pp. 196-202 and Chapter 24

- Morneau Sobeco, Handbook of Canadian Pension and Benefit Plans, Thirteenth Edition, 2005, Chapter 5
- Yamamoto, Fundamentals of Retiree Group Benefits, 2006, Chapter 7 and Chapter 8, pp. 211-230
- FAS 87 (exclude paragraphs 54, 57-62, 76-77, appendix A, appendix B illlustration 2 and 6, appendix C),(Appendix D is background only), http://www.fasb.org/pdf/fas87.pdf
- FAS 88 (exclude paragraphs 19-21, Appendix A, Appendix B illustration 6). http://www.fasb.org/pdf/fas88.pdf
- FAS 132 (excluding paragraphs 12-13, Appendices A,B, and D) Appendix E for background, http://www.fasb.org/pdf/fas132.pdf
- FAS 106 (exclude paragraphs 74, 79-84, 86-89, 108-115, appendix A, appendix C illustrations 3 and 7, appendix D), http://www.fasb.org/pdf/fas106.pdf
- FASB 158 through Appendix A, http://www.fasb.org/pdf/fas158.pdf
- R-C103-07, Comparison of IAS 19 with FAS 87/88/106, CICA 3461 and FRS 17 Summary of Provisions Affecting Accounting for Postretirement Benefits - Towers Perrin
- R-C105-07, Pension Actuary's Guide to Financial Economics
- R-C117-07, "Pension Deficits: An Unnecessary Evil", Bader
- R-C118-07(formerly 8RC-218-00), Paterson "Pension Issues in Corporate Sales, Mergers and Acquistions
- R-C121-07, (Formerly 8RU-309-06), Converting Pension Plans From a Defined Benefit to a Defined Contribution Design Issues to Consider in Canada, Gibson/Genno (skip section on Federal tax legislation)
- R-C129-07 (Formerly 8RU-201-03) "Symposium on Pension Funding Adequacy"
- R-C130-07 (Formerly 8RU-225-04), Reinventing Pension Actuarial Science (with discussion)
- R-C131-07Plan Freezes: The New Ice Age, 2005 EA meeting
- R-C136-08 (Formerly 8RU-226-04), Selection of Valuation Interest Rates for Funding Valuations of Pension Plans Traditional Pension Plan Approach Vs. Financial Economics Approach
- R-C137-08 (Formerly 8RU-202-00), Pension Projections, sections I, II, V (Sections III, IV, VI and Appendix background only)
- "Reaffirming Pension Actuarial Science" and counter papers, Mindlin *Pension Forum* April 2005, Vol. 16 No. 2, http://www.soa.org/library/newsletters/the-pension-forum/2005/april/pfn0504.pdf
- "Financial Economics and Actuarial Practice", Tony Day, NAAJ Jul 01, 2004, http://www.soa.org/library/journals/north-american-actuarial-journal/2004/july/naaj0403-6.pdf
- "Actuarial Aspects of Cash Balance Plans, *Pension Forum*, Dec. 2000 (exclude. appendices), http://www.soa.org/library/newsletters/pension-forum/2000/december/pfn0012.pdf

Learning Objectives

9. The candidate will be able to synthesize plan design and funding/accounting/economic value

Learning Outcomes

The candidate will be able to:

- a) Explain the interplay between plan design and plan funding/accounting/economic value
- b) Given the sponsor's goals, recommend an integrated plan (design and funding/accounting/economic value) and defend the recommendation
- c) Demonstrate the sensitivity of cost and economic value to given changes in plan design

- Allen, Pension Planning, Profit Sharing, and Other Deferred Compensation Plans, Ninth Edition, 2003, Chapter 14, OR Allen, Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches, Tenth Edition, 2007, Chapter 18
- R-C105-07, Pension Actuary's Guide to Financial Economics
- R-C108-07"Why are Healthy Employers Freezing their Pensions?"
- "Retirement. Benefits, Economics and Accounting: Moral Hazzard and Frail Benefit Designs, Gold, January 2005 NAAJ, http://www.soa.org/library/journals/north-american-actuarial-journal/2005/january/naaj0501-6.pdf
- Macroeconomic Aspects of Private Pensions Programs, Krzysztof M. Ostaszewski, NAAJ July 2001, http://www.soa.org/library/journals/north-american-actuarial-journal/2001/july/naaj0107-4.pdf
- Earnings Implications of Pension Expenses: A Stochastic Analysis of Ten Canadian Companies, Paul Joss, NAAJ Oct. 2005, http://www.soa.org/library/journals/north-american-actuarial-journal/2005/october/naaj0504-3.pdf
- The Shift to Defined Contribution Pension Plans: Why Did it Not Happen in Canada? Rob Brown in NAAJ, 7/2001, http://www.soa.org/library/journals/north-american-actuarial-journal/2001/july/naaj0107-5.pdf
- Pension Forum, April 2005, http://www.soa.org/library/newsletters/the-pension-forum/2005/april/pfn0504.pdf

Exam

Learning Objectives

10. The candidate will be able to analyze the regulatory environment as it effects retirement plans

Learning Outcomes

The candidate will be able to:

- a) Evaluate the effect of regulatory policies and restrictions, for all retirement plans, associated with:
 - Plan design
 - Plan establishment
 - Plan amendment
 - Plan termination/windup
 - Plan merger or spin-off
 - Reporting requirements
 - Members' rights
 - Plan funding
 - Contributions and benefits
 - Individual savings plans
 - Coordination of individual and employer sponsored retirement plans
 - Economic value to shareholders.
- b) Evaluate the tax implications of retirement plan designs and funding alternatives for the plan sponsor, shareholders and the participants
- c) Where regulations for tax-assisted retirement plans conflict with sponsor's and shareholders' goals, the candidate will be able to describe and recommend alternatives
- d) Explain the moral hazard that arises from the existence of outside (government) guarantees on the plan benefits
- e) Describe and recommend proper plan governance practices and the sponsor's fiduciary responsibility

- Allen, *Pension Planning, Profit Sharing, and Other Deferred Compensation Plans*, Ninth Edition, 2003, Chapter 3 pp. 52-54, OR Allen, *Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches*, Tenth Edition, 2007, Chapter 3, pp. 53-55
- Allen, Pension Planning, Profit Sharing, and Other Deferred Compensation Plans, Ninth Edition, 2003, Chapter 20, OR Allen, Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches, Tenth Edition, 2007, Chapter 14

- McGill, Fundamentals of Private Pensions, Eighth Edition, 2005, Chapters 5, 7
- Mitchell,/Hustead, *Pensions in the Public Sector*,2001, Chapter 2 pp 33-35
- Morneau Sobeco, Handbook of Canadian Pension and Benefit Plans, Thirteenth Edition, 2005, Chapters 2, 4, 7
- R-C102-07, Turner/Watanabe, Private Pension Policies in Industrialized Countries, 1999, Chapter 5
- R-C117-07, Pension Deficits: An Unnecessary Evil, Bader and discussions, http://www.soa.org/library/newsletters/the-pension-forum/2005/april/pfn0504.pdf
- R-C119-07 (Formerly 8R-302-01), Fiduciary Liability Issues for Selection of Investments
- R-C132-07 20 Questions Directors Should Ask About Their Role in Pension Governance

Exam

Learning Objectives

11. The candidate will be able to analyze the issues facing retirement plan sponsors regarding investment of fund assets and make recommendations on the actuarial issues*

*Note: the candidate is not expected to provide advice on investment of plan assets

Learning Outcomes

The candidate will be able to:

- a) Assess the different types and combinations of investment vehicles for providing retirement benefits given the particulars of the sponsor's financial circumstances, philosophy, industry, workforce and benefit package.
- b) Distinguish the various ways that retirement fund assets are managed.
- c) Given a context, evaluate a Statement Of Investment Policy.
- d) Assess the potential effects of various investments and investment policies on plan funding (short and long-range), accounting, design and administration.
- e) Assess the potential effects of various investments and investment policies on all of the stakeholders, including tax implications.
- f) Model the effect on setting investment strategy of factors including, cash flow requirements, various plan designs and various economic environments.
- g) Describe the regulatory restrictions on retirement plan assets.
- h) Identify the sources of investment risk and assess risk facing retirement funds.

i) Evaluate immunization strategies and other hedging techniques for asset/liability management.

- Allen, *Pension Planning, Profit Sharing, and Other Deferred Compensation Plans,* Ninth Edition, 2003, Chapters 22 and 23, OR Allen, *Retirement Plans 401(k)s, IRAs and Other Deferred Compensation Approaches.*, Tenth Edition, 2007, Chapters 24 and 29
- Morneau Sobeco, Handbook Of Canadian Pension and Benefit Plans, Chapter 6
- R-C105-07 Actuary's Guide to Financial Economics
- R-C111-07, Pensions and Endowments Ten: The Optimal Asset Allocation Under Proposed Pension Law, Latter and Galdi, Merrill Lynch
- R-C113-07, Yikes, How to think About Risk, Munell
- R-C120-07, (formerly 8RU-301-00), Introduction and Overview of Retirement Plan Investments
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- R-C134-07, Maginn and Tuttle, Managing Investment Portfolios, Third Edition Chapter 3, pp. 63-85, Chapter 6, and Chapter 7, pp. 407-465
- R-C135-07, Life Cycle Investing in Theory and Practice, Bodie
- Pension Forum: April, 2005, entire issue. http://www.soa.org/library/newsletters/the-pension-forum/2005/april/pfn0504.pdf
- "Accounting/ Actuarial Bias Enables Equity Investment By Defined Benefit Pension Plans", Bader & Gold NAAJ July 2005, http://www.soa.org/library/journals/north-american-actuarial-journal/2005/july/naaj0903-1.pdf
- "Full Circle: Purchasing Annuities in Defined Benefit Plans", Ruloff, http://www.soa.org/library/monographs/retirement-systems/managing-retirement-assets-symposium/2004/march/m-rs04-2-05.pdf

Exam

Learning Objectives

12. The candidate will be able to apply the standards of practice and guides to professional conduct

Learning Outcomes

In general or given a context, the candidate will be able to:

- a) Apply the standards related to communications to plan sponsors and others with an interest in an actuary's results (i.e., participants, auditors, etc.)
- b) Explain and apply the Guides to Professional Conduct
- c) Explain and apply relevant qualification standards
- d) Demonstrate compliance with legal requirements regarding the actuaries responsibilities to the participants, plan sponsors, etc.
- e) Explain and apply all of the applicable standards of practice related to valuing retirement obligations
- f) Recognize situations and actions that violate or compromise Standards or the Guides to Professional Conduct
- g) Recommend a course of action to repair a violation of the Standards or the Guides to Professional Conduct

- Morneau Sobeco, Handbook of Canadian Pension and Benefit Plans, Thirteenth Edition, 2005, Chapter 5
- Yamamoto, Fundamentals of Retiree Group Benefits, 2006, Appendix F pp. 1-27 only
- R-C119-07 (formerly 8R-302-01), Fiduciary Liability Issues for Selection of Investments
- ASOP 2, http://www.actuarialstandardsboard.org/pdf/asops/asop002 004.pdf
- ASOP 4, http://www.soa.org/files/pdf/asop004_046.pdf
- ASOP 23, http://www.actuarialstandardsboard.org/pdf/asops/asop023 097.pdf
- ASOP 27, http://www.actuarialstandardsboard.org/pdf/asops/asop027_053.pdf
- ASOP 35, http://www.actuarialstandardsboard.org/pdf/asops/asop035 093.pdf
- ASOP 41, http://www.actuarialstandardsboard.org/pdf/asops/asop041_086.pdf
- Pension Forum January 2005 "A Reevaluation of ASOP 27, Post-Enron: Is It an Adequate Standard of Professionalism?" by Todisco Discussions of above article by North and Turpin plus author's response, http://www.soa.org/library/newsletters/the-pension-forum/2005/january/pfn0501.pdf
- What's Wrong with ASOP 27? Bad Measures, Bad Decisions by Bader and Gold, http://www.soa.org/library/newsletters/the-pension-

forum/2005/january/pfn0501.pdf