

# ILA – Life Finance & Valuation, Canada Exam Spring/Fall 2017

#### Important Exam Information:

Exam Registration	Candidates may register online or with an application.
Order Study Notes	Study notes are part of the required syllabus and are not available electronically but may be purchased through the online store.
Introductory Study Note	The Introductory Study Note has a complete listing of all study notes as well as errata and other important information.
Case Study	There is no case study for this examination.
Past Exams	Past Exams from 2000 - present are available on the SOA website.
<u>Updates</u>	Candidates should be sure to check the Updates page on the exam home page periodically for additional corrections or notices.

Exam: ILA - LFV		TOPIC: <u>Accounting, Financial Statements and</u> <u>Disclosures</u>		
Learnin	g Objectives			
1. The candidate will understand financial statements and reports of Canadian life insurance companies as well as the professional standards addressing financial reporting and valuation				
Learnin	g Outcomes			
The car	didate will be able to:			
a)	Construct, analyze and evaluate basic financial statements for a life insurance company			
b)	Describe the structure of the Canadian Annual Statement and explain the purpose of its statements, key exhibits and schedules.			
c)	c) Describe, apply and evaluate regulatory documentation and disclosure requirements			
d) Describe, apply and evaluate the appropriate accounting treatments for insurance products, assets, derivatives and reinsurance				
e)	e) Apply and recommend methods for performing reviews of financial statements including reserves			
Syllabu	s Resources			
•	Canadian Insurance Taxation, Swales and Erinc,	4 <sup>th</sup> Edition, 2015 Ch 3 - 6, 9 and 24		
•	Valuation of Life Insurance Liabilities, Lombardi,	4 <sup>th</sup> Edition, Ch. 1		
•	LFV-102-09: Actuarial Review of Reserves and Other Annual Statement Liabilities			
•	<ul> <li>LFV-618-13: OSFI Guideline D-10: Accounting for Financial Instruments Designated as Fair Value Option</li> </ul>			
•	LFV-620-14: OSFI Guideline E15: Appointed Ac Review (September 2012)	tuary – Legal Requirements, Qualifications and External		
•	LFV-634-17: CIA Standards of Practice: Insurance Sections 2400 & 2700, June 2015			
•	LFV-635-13: Participating Account Management and Disclosure to Participating Policyholders and Adjustable Policyholders			
•	CIA Educational Note: Valuation of Gross Policy Liabilities and Reinsurance Recoverables, December 2010			
•	<u>CIA Educational Note: CALM Implication of AcSB Section 3855 Financial Instruments – Recognition</u> and Measurement (June, 2006)			
•	CIA Educational Note on IFRS: Classification of	Contracts under IFRS (IASP 3)		

- <u>CIA Educational Note on IFRS: Measurement of Investment Contracts and Service Contracts under IFRS</u>
   (IASP 4)
- <u>CIA Research Paper on IFRS: Embedded Derivatives and Derivatives under IFRS (IASP 10)</u>
- <u>CIA Research Paper, IFRS Disclosure Requirements for Life Insurers (December, 2010)</u>
- <u>Future Income and Alternative Taxes</u>, CIA Educational Note, December 2012
- Actuarial Aspects of SOX 404, Financial Reporter #59, 12/04
- <u>Responsibilities of the Actuary for Communicating Sarbanes-Oxley control: Effectiveness in Accordance</u> with Actuarial Standards of Practice, Financial Reporter #59, 12/04
- <u>CIA Educational Note: Guidance on Fairness Opinions Required Under the Insurance Companies Act</u> <u>Pursuant to Bill C-57 (2005)</u>
- CIA Educational Note: Dividend Determination for Participating Policies, January 2014

Exam: ILA – LFV	TOPIC: Valuation		
Learning Objectives			
2. The candidate will understand and apply valuation principles to individual life insurance and annuity products issued by Canadian life insurance companies.			
Learning Outcomes			
The candidate will be able to:			
a) Compare and apply methods for life and annuity produc	et liabilities		
b) Evaluate, calculate, and interpret liabilities.			
c) Recommend and justify appropriate valuation assumption	ons.		
Syllabus Resources			
• Valuation of Life Insurance Liabilities, Lombardi, 4th	Edition, Ch. 1		
• LFV-133-16: Cluster Analysis: A Spatial Approach to			
• LFV-634-17: CIA Standards of Practice: Insurance Se			
• LFV-637-13: OSFI Letter Evidence for Mean Reversi	on in Equity Prices		
<u>CIA Educational Note: Best Estimates Assumptions fo</u>	*		
<u>CIA Educational Note: Margins for Adverse Deviation</u>	ns (MfAD) – November 2006		
<u>CIA: Valuation of Segregated Fund Investment Guara</u>	ntees October 2005		
<u>CIA Educational Note: Considerations in the Valuation</u>	n of Segregated Fund Products November 2007		
<u>CIA Educational Note: Approximations to the Canadia</u>	an Asset Liability Method (CALM): November 2006		
• <u>CIA Educational Note: Expected Mortality: Fully Underwritten Canadian Individual Life Insurance Policies</u> : July 2002 (excl. appendices)			
• <u>Report of the Task Force on Segregated Fund Liability and Capital Methodologies</u> (August 2010)			
<u>CIA Educational Note: Reflection of Hedging in Segregated Fund Valuation (May 2012)</u>			
CIA Educational Note: Future Income and Alternative Taxes excluding Appendix D (December 2012)			
CIA Final Communication of a Promulgation of Prescribed Mortality improvement Rates Referenced in the			
Standards of Practice for the Valuation of Insurance Contract Liabilities: Life and Health (Accident and			
Sickness) Insurance (Subsection 2350) July 2011			
<u>CIA Research Paper: Mortality Improvement Research</u>	h Paper (September 2010)		
<u>CIA Educational Note: Valuation of Universal Life Policy Liabilities</u> , February, 2012			
• CIA Use of Actuarial Judgment in Setting Assumptions and Margins for Adverse Deviations, November 2006			

- <u>CIA Educational Note, Currency Risk in the Valuation of Policy Liabilities for Life & Health Insurers, Dec</u> 2009
- CIA Education Note, Investment Returns for Non-fixed Income Returns for Assets, March 2011
- Final Communication of Promulgations of the Maximum Net Credit Spread, Ultimate Reinvestment Rates and Calibration Criteria for Stochastic Risk-Free Interest Rates in the Standards of Practice, May 2014
- <u>CIA Educational Note</u>: Investment Assumptions Used in the Valuation of Life and Health Insurance Contract Liabilities <u>September 2015</u>
- <u>CIA Research Paper, Fixed Income Calibration April 2014</u>
- <u>CIA Educational Note</u>, <u>Development of the Equilibrium Risk-Free Market Curve for the Base Scenario</u>, December 2015

Exam:	ILA - LFV	TOPIC: Emerging Standards			
Learnin	Learning Objectives				
3. The candidate will understand and apply emerging financial and valuation standards, principles and methodologies.					
Learning Outcomes					
The car	ndidate will be able to:				
<ul> <li>a) Describe emerging developments impacting Canadian valuation, capital, and International Financial Reporting frameworks, and assess their impact on the valuation of reserves, capital and financial statements</li> </ul>					
Syllabu	s Resources				
<ul> <li>LFV-132-14: Practical Guide to IFRS, (July 2013)</li> <li>LFV-134-16: IFRS PWC Ready or Not, October 2014</li> <li>LFV-135-16: How We Responded to Feedback on the 2013 Exposure Draft, IASB</li> <li>LFV-139-17: IFRS 4 Phase II: Illustrative Example of Life Contract Without Participation Features</li> <li>LFV-140-17: Mind the Gap? December 2015</li> <li>LFV-642-16: OSFI: Life Insurance Capital Framework Standard Approach – Jan 2015</li> <li>LFV-644-17: OSFI: A New Chapter in Life Insurance Capital Requirements – Apr 2016</li> <li>Analysis of Methods for Determining Margins for Uncertainty Under a Principle-Based Framework for Life Insurance and Annuity Products, Ch. 3, 4, 5.1, 5.5-5.6, 6</li> </ul>					

Exam: ILA – LFV	TOPIC: Financial and Capital Management			
Learning Objectives				
4. The candidate will be able to explain and apply the methods, approaches and tools of financial management and value creation in a life insurance company context.				
Learning Outcomes				
The candidate will be able to:				
a) Assess financial performance, including analyzing and interpreting the financial performance of a product line or company.				
b) Apply methods and principles of embedded value.				
c) Explain and apply methods in determining regulatory capital and economic capital.				
d) Explain and evaluate the respective perspectives of regulators, investors, policyholders and insurance company management regarding the role and determination of capital.				
e) Explain Canadian regulatory capital framework and	l principles.			
f) Explain and apply methods in earnings management and capital management.				
Syllabus Resources				
• Valuation of Liabilities, Lombardi, 4th Edition, Ch.	16 (excl. 16.6)			
<ul> <li>LFV-106-07: Chapter 4 of <i>Insurance Industry Mergers &amp; Acquisitions</i> (Sections 4.1-4.6)</li> <li>LFV-136-16: <i>Life Insurance Products and Finance</i>, Atkinson &amp; Dallas, Chapter 11, pp. 499 - 502</li> <li>LFV-137-16: EVARAROC vs MCEV Earnings – A Unification Approach, 2011</li> <li>LFV-138-16: Prudential Financial Stockholder's Equity and Operating Leverage, 2008</li> <li>LFV-603-13: OSFI Guideline D-9 -Source of Earning Disclosure (Life Insurance Companies)</li> <li>LFV-606-17: OSFI Guideline – Minimum Continuing Capital and Surplus Requirements (MCCSR) For Life Insurance Companies, Sections 1 – 5, 8 – 9, November 2015</li> </ul>				
<ul> <li>LFV-626-10: Session PD-28: Embedded Value (EV) and Market-Consistent Embedded Value (MCEV). Wha is the Difference?</li> <li>LFV-636-13: OSFI Guideline A-4 Internal Target Capital Ratio for Insurance Companies</li> <li>LFV-641-15: OSFI: Own Risk and Solvency Assessment (E-19) (January 2014)</li> </ul>				
<ul> <li><u>Strategic Management of Life Insurance Company Surplus</u>, TSA XXXVIII (pages 105-116)</li> <li><u>CIA: Sources of Earnings: Determination and Disclosure</u>, August 2004</li> <li><u>Embedded Value: Practice and Theory</u>, SOA, Actuarial Practice Forum, March 2009.</li> </ul>				

- <u>A Multi-Stakeholder Approach to Capital Adequacy,</u> Conning Research & Consulting
- Economic Capital for Life Insurance Companies, SOA Research paper, Feb 2008, Ch. 1 and 3-6

Exam: ILA – LFV	TOPIC: <u>Reinsurance</u>			
Learning Objectives				
5. The candidate will understand the nature and uses of basic reinsurance arrangements used by life insurance companies.				
Learning Outcomes				
The candidate will understand the various forms of reinsurance, and be able to, with respect to both the ceding and assuming parties, analyze and evaluate: i) Risk transfer considerations ii) Cash flow mechanics iii) Accounting and financial statement impacts iv) Reserve credit considerations				
Syllabus Resources				
• Life, Health & Annuity Reinsurance, Tiller, 4th Edition	n, Ch. 4, Ch. 5, Ch. 6 (pages 157 – 160 & 173-174), Ch. 7,			
Ch. 8 (Canadian content only), Ch. 12, and Ch. 17				
• LFV-606-17: OSFI: Guideline Minimum Continuing Companies Section 10 only, November 2015	Capital and Surplus Requirements for Life Insurance			
• LFV-632-12: OSFI Guideline B-3: Sound Reinsurance Practices and Procedures				
• Accounting for Reinsurance Contracts under International Financial Reporting Standards (IASP 9) (exclude				

 <u>Accounting for Reinsurance Contracts under International Financial Reporting Standards (IASP 9)</u>, (exclude Appendices C and D)