



# GH – Finance & Valuation Canada Exam Segments A and C

Fall 2020/Spring 2021

# Important Exam Information:

| Exam Registration       | Candidates may register online or with an application.   |
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| Order Study Notes       | Study notes are part of the required syllabus and are not available electronically but may be purchased through the online store.  |
| Syllabus Readings       | Readings listed in this syllabus may include study notes, online<br>readings and textbooks. Candidates are responsible for all readings<br>in their entirety, including sections such as Appendices, unless it is<br>stated otherwise in the syllabus. |
| Introductory Study Note | The Introductory Study Note has a complete listing of all study notes as well as errata and other important information.   |
| <u>Case Study</u>       | A copy of the case study will be provided with the examination.<br>Candidates will not be allowed to bring their copy of the case study<br>into the examination room.  |
| Past Exams              | Past Exams from 2000-present are available on 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.  |

# 1. Topic: Reserving

## **Learning Objectives**

The candidate will understand and apply valuation principles for insurance contracts.

## Learning Outcomes

The Candidate will be able to:

- a) Describe the types of claim reserves (e.g., due and unpaid, ICOS, IBNR, LAE, PVANYD)
- b) Explain the limitations and biases of the traditional valuation methods:
- c) Calculate appropriate claim reserves given data
- d) Reflect environmental factors in reserve calculations (trend, seasonality, claims processing changes, etc.)
- e) Evaluate data resources and appropriateness for calculating reserves
- f) Describe, calculate and evaluate non-claim reserves and explain when each is required
- g) Apply applicable standards of practice related to reserving

- Group Insurance, Skwire, Daniel D., 7<sup>th</sup> Edition, 2016
  - o Ch. 37: Claim Reserves for Short-Term Benefits
  - o Ch. 38: Claim Reserves for Long-Term Benefits
- Individual Health Insurance, Bluhm, William and Leida, Hans, 2<sup>nd</sup> Edition, 2015
  - o Ch. 6: Reserves and Liabilities
  - Ch. 8: Forecasting and Modeling
- GHFV-103-16: Health Reserves
- GHFV-114-19: Canadian Institute of Actuaries Standards of Practice—Insurance, Feb 2018, sections 2120 and 2300 (excluding sections 2320.33-2320.37, 2340, 2350.10 to 2350.14, 2350.19-2350.27, 2350.41-2350.45, 2360 & 2370)
- <u>CIA Educational Note Valuation of Group Life and Health Policy Liabilities</u>, sections 6-12 and Appendices C & D
- AAA Premium Deficiency Reserves Discussion Reports
- Read. Think. Write., Health Section News, Oct 2004
- <u>Claim Reserve Model–How Actuaries Rely Upon the Claim Data They Receive</u>, Long Term Care News, Sep 2008
- ASOP 5: Incurred Health and Disability Claims (excluding Appendix)
- ASOP 7: Analysis of Life, Health or Property/Casualty Insurer Cash Flows (excluding Appendix)

- ASOP 22: Statement of Opinion Based on Asset Adequacy Analysis by Actuaries for Life or Health Insurers (excluding Appendix)
- ASOP 23: Data Quality (excluding Appendix)
- ASOP 41: Actuarial Communications (excluding Appendix)
- ASOP 42: Health and Disability Actuarial Assess and Liabilities Other than Liabilities for Incurred Claims (excluding Appendices)



# 2. Topic: Actuarial Appraisal

## Learning Objectives

The candidate will understand an actuarial appraisal.

## **Learning Outcomes**

The Candidate will be able to:

- a) Differentiate the components of an actuarial appraisal versus an embedded value
- b) Describe an approach for preparing an actuarial appraisal
- c) Describe risks associated with interpreting an actuarial appraisal and an embedded value
- d) Differentiate traditional, European, and market-consistent embedded value
- e) Describe the actuarial due diligence process
- f) Apply applicable Actuarial Standards of Practice

- GHFV-130-19: Ch. 4 of *Insurance Industry Mergers and Acquisitions*, Toole and Herget, sections 4.1-4.5 & 4.7-4.8
- GHFV-131-19: Ch. 5 of *Insurance Industry Mergers and Acquisitions*, Toole and Herget, sections 5.1-5.2, 5.5 & 5.6.1-5.6.2
- GHFV-132-20: 2018 Embedded Value Report for Manulife's Insurance Businesses
- GHFV-133-19: Simple Embedded Value Example
- ASOP 19: Appraisals of Casualty, Health and Life Insurance Businesses (excluding Appendices)
- Embedded Value: Practice and Theory

## 3. Topic: Government Programs

#### Learning Objectives

The candidate will understand how to describe and evaluate government programs providing health and disability benefits in Canada.

#### Learning Outcomes

The Candidate will be able to:

- a) Describe eligibility requirements for social programs in Canada and the benefits provided
- b) Describe how private group insurance plans work within the framework of social programs in Canada
- c) Compare social programs in Canada and the United States and discuss the value of the different systems

#### Resources

- Group Insurance, Skwire, Daniel D., 7<sup>th</sup> Edition, 2016
  - o Ch. 9: Government Health Plans in the United States
  - o Ch. 18: The Affordable Care Act
- Morneau Shepell Handbook of Canadian Pension Benefit Plans, 16th Edition, 2016\*
  - Ch. 2: Government Pension Programs (pp. 48-72, Canada & Quebec Pension Plans)
  - o Ch. 17: Provincial Hospital and Medical Insurance Plans
  - o Ch. 18: Workers' Compensation
  - o Ch. 19: Employment Insurance

#### \*Candidates may also use:

- Morneau Shepell, Handbook of Canadian Pension and Benefit Plans, 17<sup>th</sup> Edition, 2020
  - Ch. 2: Government Pension Programs (pp. 44-64, Canada & Quebec Pension Plans)
  - o Ch. 17: Provincial Hospital and Medical Insurance Plans
  - Ch. 18: Workers' Compensation
  - o Ch. 19: Employment Insurance
- GHFV-651-16: The High-Stakes Battle of Medications, Insurers and The Government
- GHFV-652-16: Quebec Amends the Act Respecting Prescription Drug Insurance and the Health Insurance Act, 2015
- GHFV-653-16: Telus Health Note: How Much Does that Drug Cost?
- GHFV-673-17: CIA Public Position on a National Pharmacare Plan
- GHFV-686-18: Morneau Shepell New & Views, Volume 13, Issue 12, Dec 2016
- GHFV-694-19: Guide to Canada Benefits Legislation, 2018, sections 4, 5, 6, 7.1, 7.2, 7.2.1, 7.2.5 & 7.2.6

- GHFV-695-19: A Joint Statement from the pan-Canadian Pharmaceutical Alliance and the Canadian Generic Pharmaceutical Association
- GHFV-696-19: Ensuring the Accessibility, Affordability and Sustainability of Prescription Drugs in Canada (Introduction and Exec Summary only)
- GHFV-697-19: Morneau Shepell New & Views, Volume 15, Issue 9, Sep 2018, section 1; Cannabis: Employer Considerations in a Changing Landscape
- GHFV-701-20: B.C. Pharmacare's Biosimilar Transition and Your Drug Plan
- GHFV-702-20: OHIP+ Pharmacy Redesign Update FAQS For Patients
- <u>Sustainability of the Canadian Health Care System and Impact of the 2014 Revision to the Canada</u> <u>Health Transfer</u>, Sep 2013, Executive Summary & Ch. 11 only



## 4. Topic: Financial Statements

### **Learning Objectives**

The candidate will understand how to prepare and be able to interpret insurance company financial statements in accordance with IFRS & IAS.

#### **Learning Outcomes**

The Candidate will be able to:

- a) Interpret insurer financial statements from the viewpoint of various stakeholders
- b) Evaluate key financial performance measures used by life and health insurers for both short and longterm products
- c) Project financial outcomes and recommend strategy to senior management to achieve financial goals
- d) Describe the planning process of a life and health insurance company (strategic, operational, and budgeting)
- e) Compare key differences and similarities in measures by accounting basis
- f) Describe how to compute the taxable income of a life and health insurance company
- g) Explain fair value accounting principles and describe International Accounting Standards (IAS)
- h) Construct basic financial statements and associated actuarial entries for a life and health insurance company

- Group Insurance, Skwire, 7<sup>th</sup> Edition, 2016
  - Ch. 35: Group Insurance Financial Reporting (excluding pp. 614-623)
  - o Ch. 41: Analysis of Financial and Operational Performance
- Canadian Insurance Taxation, Swales et al., 4th Edition, 2015
  - o Ch. 2: Taxation of Life Insurers An Introduction
- GHFV-109-19: Health Insurance Accounting Basics for Actuaries, pp. 100-101, 116-119 and sections 4.4 & 7
- GHFV-612-13: Simplified Example of CALM Reserve Methodology
- GHFV-620-13: Educational Note on Source of Earnings Calculations Group Life and Health
- GHFV-683-17: CIA Educational Note Dynamic Capital Adequacy Testing
- GHFV-684-17: OSFI Guideline E18: Stress Testing
- GHFV-691-18: IFRS 17 Implications of the Proposed New Standard
- GHFV-693-19: OFSI Guidelines for Life Insurance Capital Adequacy Test (LICAT) Read introductions to all chapters below:
  - Chapter 1: Overview and General Requirements (All sections) (pp. 5-13)

- Chapter 2: Available Capital (sections 2.1-2.2) (pp. 14-37)
- Chapter 3: Credit Risk On-Balance Sheet Items (sections 3.1.2-3.1.8) (pp. 44-50)
- Chapter 5: Interest rate risk (sections 5.1-5.1.3.2) (pp. 82-94)
- Chapter 6: Insurance Risk: (sections 6.1-6.8, excluding 6.7) (pp. 120-138)
- o Chapter 8: Operational Risk (All sections) (pp. 170-173)
- Chapter 10: Credit for Reinsurance (sections 10.1-10.4.1) (pp. 183-190)
- Chapter 11: Aggregation and Diversification of Risk (All sections) (pp. 197-204)
- GHFV-698-19: CIA Draft Educational Note Comparison of IFRS 17 to Current CIA Standards of Practice, Sep 2018 (excluding 3.3, 7.3.1, 7.3.3 & 8.1.1)
- GHFV-699-19: OSFI Guideline Source of Earnings Disclosure
- GHFV-703-20: CIA Draft Educational Note Application of IFRS 17 Insurance Contracts (Ch. 5: Level of Aggregation)
- GHFV-704-20: CIA Draft Educational Note IFRS 17 Coverage Units for Life and Health Insurance Contracts (excluding sections 3.1.2, 3.1.3, 3.2, 3.4)

## 5. Topic: Regulation & Taxation

#### Learning Objectives

The candidate will understand how to evaluate the impact of regulation and taxation on insurance companies and plan sponsors in Canada.

#### Learning Outcomes

The Candidate will be able to:

- a) Describe the regulatory and policy making process in Canada
- b) Describe the major applicable laws and regulations and evaluate their impact
- c) Understand the impact of the taxation of both insurance companies and the products they provide

- Canadian Insurance Taxation, Swales, et. al., 4<sup>th</sup> Edition, 2015
  - Ch. 1: Insurance Corporations (background only)
  - Ch. 4: Income for Tax Purposes General Rules (pp. 37-38 [excluding "Imputed Interest Benefit on Real Property"] & 43-47)
  - o Ch. 6: Reserves (pp. 79-96)
  - Ch. 9: Investment Income Tax (pp. 135-142)
- GHFV-621-19: Canadian Life and Health Insurance Association: Guideline G3, Group Life and Health Insurance
- GHFV-625-16: Legal Aspects of Group Insurance in the Province of Québec (2015 Edition)
- GHFV-628-17: The Quebec Act Respecting Prescription Drug Insurance and Its Impacts on Private Group Insurance Plans, 2016
- GHFV-631-13: Canadian Life & Health Insurance Association: The Protection of Personal Information Under Group Benefit Plans
- GHFV-637-13: Ch. 16 and 17 of Canadian Life & Health Insurance Law, Jones, H. E.
- GHFV-644-17: TACCESS: An Advisor's Guide to Understanding How Taxes Impact Group Insurance Benefits in Canada
- GHFV-647-15: Protecting Canadians' Long Term Disability Benefits
- GHFV-648-15: Canadian Life and Health Insurance Industry Agreement to Protect Canadians' Drug Coverage
- GHFV-659-16: Ontario 2014 Budget Will Forbid Employers from Self-Insuring Long Term Disability Plan to Employees
- GHFV-660-16: Self-Funded Disability Plans: Time Running Out on Federally Regulated Employers
- GHFV-661-16: Employee Life and Health Trusts & Health and Welfare Trusts
- GHFV-662-16: Firefighter Who Died of Cancer was Killed in the Line of Duty, Court Says

- GHFV-663-16: West Nile Victim Wins \$130,000 Insurance Payout
- GHFV-671-16: CHLIA Guideline G4 Coordination of Benefits
- GHFV-672-16: CHLIA Guideline G17 Coordination of Benefits for Out-of-Country/Out-of-Province/Territory Medical Expenses
- GHFV-685-17: Campagnie D'Assurances Standard Life V. Tremblay 2010—QCCA 933: A Hefty Price to Pay for Unwarranted Surveillance
- GHFV-700-19: Ch. 12 (sections 12.1-12.4) and 13 of *Canadian Handbook of Flexible Benefits*, McKay, Robert J., 3<sup>rd</sup> Edition
- GHFV-705-20: Assuris for Group Insurance in Canada
- GHFV-706-20: PMPRB-Framework Modernization



## 6. Topic: Retiree Benefits

## Learning Objectives

The candidate will understand and evaluate post-retirement and post-employment benefits in Canada.

#### Learning Outcomes

The Candidate will be able to:

- a) Describe why employers offer post-retirement and post-employment benefits
- b) Determine appropriate baseline assumptions for benefits and population
- c) Determine employer liabilities, service cost and expense for post-retirement and post-employment benefits for financial reporting purposes under IFRS and understand differences compared to US GAAP
- d) Describe funding alternatives for post-retirement and post-employment benefits
- e) Describe current issues faced by governments, employers and employees related to post-retirement and post-employment benefits
- f) Apply actuarial standards of practice to post-retirement and post-employment benefit plans

## Resources

- Morneau Shepell Handbook of Canadian Pension & Benefit Plans, 16<sup>th</sup> Edition, 2016\*
  - o Ch. 24: Post-retirement and Post-employment Benefits

## \*Candidates may also use:

- Morneau Shepell, Handbook of Canadian Pension and Benefit Plans, 17<sup>th</sup> Edition, 2020
  - o Ch. 24: Post-retirement and Post-employment Benefits
- GHFV-632-13: IAS19
- GHFV-633-20: CIA Standards of Practice Practice-Specific Standards for Post- Employment Benefit Plans
- GHFV-649-15: Comparison of IAS 19, Rev. 2011 with FASB ASC 715: Summary of Provisions Affecting Accounting for Postretirement Benefits
- GHFV-650-15: Supplement Calculation Note for IAS 19
- GHFV-667-16: Hicks Morley Pension and Benefits–2013 Case Law Update, pp. 62-70
- GHFV-668-16: The New Reality of Retiree Benefits
- GHFV-669-16: The End of Retiree Benefits?