



GH – Finance & Valuation Canada Exam Segments A and C Fall 2021

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.
Syllabus Readings	Readings listed in this syllabus may include study notes, online readings and textbooks. Candidates are responsible for all readings in their entirety, including sections such as Appendices, unless it is 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. Candidates will not be allowed to bring their copy of the case study 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.

SEGMENT A

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

Resources

- Group Insurance, Skwire, Daniel D., 7th Edition, 2016
 - o Ch. 37: Claim Reserves for Short-Term Benefits
 - o Ch. 38: Claim Reserves for Long-Term Benefits

*Candidates may also use: Group Insurance, Skwire, Daniel D., 8th Edition, 2021

- o Ch. 39: Claim Reserves for Short-Term Benefits
- Ch. 40: Claim Reserves for Long-Term Benefits
- Individual Health Insurance, Bluhm, William and Leida, Hans, 2nd 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)
- ASOP 5: Incurred Health and Disability Claims (excluding Appendix)
- <u>ASOP 7: Analysis of Life, Health or Property/Casualty Insurer Cash Flows</u> (excluding Appendix)
- <u>ASOP 22: Statement of Opinion Based on Asset Adequacy Analysis by Actuaries for Life or Health</u> <u>Insurers</u> (excluding Appendix)
- <u>ASOP 23: Data Quality</u> (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)
- <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
- <u>Read. Think. Write.</u>, 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



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) Calculate an embedded value
- g) Apply applicable Actuarial Standards of Practice

Resources

- 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

SEGMENT C

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., 7th Edition, 2016
 - Ch. 9: Government Health Plans in the United States
 - Ch. 18: The Affordable Care Act

*Candidates may also use: Group Insurance, Skwire, Daniel D., 8th Edition, 2021

- Ch. 9: Government Health Plans in the United States
- Ch. 19: The Affordable Care Act
- Morneau Shepell Handbook of Canadian Pension Benefit Plans, 17th Edition, 2020
 - o 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
 - 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-673-17: CIA Public Position on a National Pharmacare Plan
- 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

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- 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

Resources

- *Group Insurance*, Skwire, 7th Edition, 2016
 - Ch. 35: Group Insurance Financial Reporting (excluding pp. 614-623)
 - o Ch. 41: Analysis of Financial and Operational Performance

*Candidates may also use: Group Insurance, Skwire, Daniel D., 8th Edition, 2021

- Ch. 37: Group Insurance Financial Reporting in Canada
- Ch. 43: Analysis of Financial and Operational Performance
- Canadian Insurance Taxation, Swales et al., 4th Edition, 2015
 - 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-684-17: OSFI Guideline E18: Stress Testing
- GHFV-693-19: OFSI Guidelines for Life Insurance Capital Adequacy Test (LICAT)

Read introductions to all chapters below:

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- 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)
- 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-698-21: Comparison of IFRS 17 to Current CIA Standards of Practice, Nov 2020 (excluding sections 3.3, 7.2.1, 7.2.2, 7.2.3, 7.2.5 & 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)
- GHFV-707-21: IFRS 17 and the Appointed Actuary in Canada
- GHFV-708-21: CIA Revised Draft Educational Note Assessing Eligibility for the Premium Allocation Approach Under IFRS 17 for Property & Casualty and Life & Health Insurance Contracts
- <u>CIA Educational Note Financial Condition Testing</u>, Apr 2020, pp. 1-38
- IFRS 17 Insurance Contract Examples

SEGMENT C

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

Resources

- Canadian Insurance Taxation, Swales, et. al., 4th 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-653-16: Telus Health Note: How Much Does that Drug Cost?
- 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., 3rd Edition
- GHFV-705-20: Assuris for Group Insurance in Canada
- GHFV-706-20: PMPRB-Framework Modernization
- GHFV-709-21: Brooks V. Canada Safeway Ltd., pp. 1219-1227 (up to section II)
- GHFV-710-21: Termination of Benefits Coverage at Age 65 Declared Unconstitutional

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, 17th Edition, 2020
 - 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?
- <u>CIA Educational Note Health Care Trend Rate</u>, (pp. 4-17 only)