

FCIA SYLLABUS: READING LIST

Group benefits track

Exam F1GB: Product Design and Group Benefits Environment

The aim of this exam is for candidates to develop the following skills:

1. Understand the main principles and techniques of design that are relevant to group insurance.
2. Apply these principles and techniques within the context of group insurance.
3. Evaluate hypothetical scenarios, including using judgment to assess the implications of possible actions and to develop appropriate proposals or recommendations relating to pricing group insurance products.
4. Understand the Canadian health insurance environment.
5. Understand US and other health insurance environments.

1. Principal terms	
1. Define principal terms used in group benefits and health insurance design. (A1)	
Reading Reference	Source
Canadian Life and Health Insurance Association (CLHIA). 2023. Toronto (ON): CLHIA. "Glossary of insurance terms."	https://www.clhia.ca/web/CLHIA_LP4W_LND_Webstation.nsf/page/FF801CA8A20C46568525780E00665851!OpenDocument

2. Product design (25%)	
<ol style="list-style-type: none"> 1. Analyze benefits' design features and provisions (life, premium waiver, accidental death, and dismemberment [AD&D], disability, medical, drug, dental, critical illness [CI], long-term care [LTC], optional benefits, individual health insurance). (D4) 2. Analyze issues associated with benefit design and calculate, compare, and contrast benefit-coverage levels (drug formularies, new drugs, drug substitution [generic or other], preferred provider networks, direct payment, evolution of dental-fee guides, emerging illnesses, digital/virtual products, health care/wellness spending accounts, etc.). (C4) 3. Analyze and calculate possible participant anti-selection and its related impacts. (C4) 4. Understand the rationale underlying risk classification for individual health products. (B2) 5. Evaluate the structure of employee-benefit plans and products offered, and the rationale for offering these structures. (B5) 6. Recommend an employee-benefit strategy considering an employer's objectives. (C5) 	
Reading Reference	Source
Shepell M. 2020. <i>Handbook of Canadian Pension and Benefits Plans</i> . 17th ed. Toronto (ON): LexisNexis. Chapters 16 (p. 459-466), 20 (p. 497-514), 21 (p. 515-529), 23 (p. 545-554), 25 (p. 567-588).	https://store.lexisnexis.ca/en/categories/shop-by-jurisdiction/promo-8/morneau-shepell-handbook-of-canadian-pension-and-benefit-plans-17th-edition-skusku-cad-6426/details
Canadian Life and Health Insurance Association (CLHIA). [date unknown]. <i>A Guide to Long-Term Care Insurance</i> . Toronto (ON): CLHIA.	https://www.clhia.ca/web/CLHIA_LP4W_LND_Webstation.nsf/resources/Consumer+Brochures/\$file/Brochure_Guide_Long_Term_Care_ENG.pdf
CIA/SOA Research Report: <i>Model of Long-Term Health Care Cost Trends in Canada</i> .	https://www.cia-ica.ca/publications/218034e/

Hurley J, Guindon GE. 2020. "Private health insurance in Canada." In: Thomson S, Sagan A, Mossialos E, editors. <i>Private Health Insurance: History, Politics and Performance</i> . Cambridge (UK): Cambridge University Press; p. 99-141. p. 112-120.	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/F7C98364E41439D3DF992CA52D095066/9780521125826c4_99-141.pdf/private-health-insurance-in-canada.pdf
2021 Benefits Canada Healthcare Survey. 2021. <i>Benefits Canada</i> . Montreal (QC): Context Group.	https://www.benefitscanada.com/wp-content/uploads/sites/7/2021/10/BCHS-Report-2021-ENG-7-Final-WEB1.pdf
MacDonald A. 2011. <i>The Actuarial Relevance of Genetic Information in the Life and Health Insurance Context</i> . Gatineau (QC): Office of the Privacy Commissioner of Canada.	https://www.priv.gc.ca/media/1737/qi_macdonald_201107_e.pdf
RBC Insurance. 2016. <i>Occupation Schedule for Individual Disability Insurance</i> . Toronto (ON): RBC Capital Markets. p. 18-27.	https://www.rbcinsurance.com/files/00105/file-105402.pdf
Dionne G, Rothschild CG. 2012. <i>Risk Classification and Health Insurance</i> . Montreal (QC): Canada Research Chair in Risk Management.	https://chairegestiondesrisques.hec.ca/wp-content/uploads/pdf/cahiers-recherche/12-09.pdf

3. Benefit law and regulation (20%)

1. Understand the effects of applicable legislation and regulation, including (but not limited to) privacy, human rights, and non-discrimination on the following: (B2)
 - a. Allowable benefits and exclusions.
 - b. Benefit plan design and pricing.
 - c. Plan administration.
 - d. Claims management and administration.
 - e. Human rights and non-discrimination.
2. Outline provisions of the Canadian Life and Health Insurance Association (CLHIA) guidelines and calculate impacts where applicable (definitions of groups, takeover rules, coordination of benefits, disclosure). (C3)
3. Outline and apply applicable provisions of the Civil Code of Québec to group insurance. (C3)
4. Outline and apply applicable provisions of other relevant laws and regulations to group insurance. (C3)
5. Apply relevant case law and interpret its implications. (C3)
6. Outline and apply provincially mandated benefits (prescription drug coverage in Québec, etc.). (C3)
7. Compare and contrast the main differences between Québec law and the rest of Canada (designation of beneficiary, change of insurers, civil union, etc.). (D5)
8. Outline and describe the legal aspects of self-insurance. (B2)

Reading Reference	Source
Jones HE. 1992. <i>Canadian Life and Health Insurance Law</i> . Atlanta (GA): FLMI Insurance Education Program, Life Management Institute, LOMA. Chapters 16, 17.	Documentation will be provided by the CIA following the exam registration process.
CIA Study Note: <i>Legal Aspects of Group Insurance in the Province of Québec</i> . 2023 ed.	Documentation will be provided by the CIA following the exam registration process.
Canadian Life and Health Insurance Association (CLHIA). 2013. Guideline G3: <i>Group Life and Health Insurance</i> . Toronto (ON): CLHIA.	https://www.clhia.ca/web/CLHIA_LP4W_LND_Webstation.nsf/page/13CD6FF39333FB8E8525784F0058BAC4/\$file/G3.pdf
Canadian Life and Health Insurance Association (CLHIA). 2012. Guideline G4: <i>Coordination of Benefits – Group Health and Dental</i> . Toronto (ON): CLHIA.	https://www.clhia.ca/web/CLHIA_LP4W_LND_Webstation.nsf/page/28DE0F1EE2ACED4285257841005B27F8!OpenDocument
Canadian Life and Health Insurance Association (CLHIA). 2013. Guideline G17: <i>Coordination of Benefits for Out-of-Country / Out of Province/Territory Medical Expenses</i> . Toronto (ON): CLHIA.	https://www.clhia.ca/web/CLHIA_LP4W_LND_Webstation.nsf/page/997EE7D7E3EA220585257C3C006D5D12/\$file/G17.pdf
Canadian Life and Health Insurance Association (CLHIA). <i>The Protection of Personal Information Under Group Benefit Plans</i> . Toronto (ON): CLHIA.	Documentation will be provided by the CIA following the exam registration process.
CIA Study Note: <i>Canadian Contract Law</i> . 2023.	Documentation will be provided by the CIA following the exam registration process.

Albanese M-C. <i>Legal Considerations on Group LTD and Life Insurance</i> [PowerPoint]. Practice Education Course; 2021.	Documentation will be provided by the CIA following the exam registration process.
CIA Study Note: <i>AD&D Cases</i> .	Documentation will be provided by the CIA following the exam registration process.
CIA Study Note: <i>The Chaoulli case and its impacts on public and private health insurance</i> .	Documentation will be provided by the CIA following the exam registration process.
CIA Study Note: <i>The Québec Act Respecting Prescription Drug Insurance and Its Impact on Private Group Insurance Plans</i> . 2023 ed.	Documentation will be provided by the CIA following the exam registration process.
CIA Study Note: <i>Self-Insurance for Group Benefits Programs</i> . 2016 ed.	Documentation will be provided by the CIA following the exam registration process.

4. Insurance company law and regulation (15%)

1. Understand and apply the following legislation: (B3)
 - a. Office of the Superintendent of Financial Institutions (OSFI) guidelines.
 - b. Insurance Companies Act.
 - c. Uniform Life Insurance Act and major variations.
 - d. Uniform Health Insurance Act and major variations.
 - e. Quebec's Civil Code.
 - f. Other provincial laws that have an impact on insurance (regulations on insurance and other acts, laws on the sale and distribution of insurance products, etc.).
2. Evaluate special issues (group creditor insurance, change of carrier, designation of beneficiary, etc.). (B5)
3. Identify and understand relevant case law and its implications. (D2)

Reading Reference	Source
Office of the Superintendent of Financial Institutions (OSFI). 2018. <i>Corporate Governance</i> [guideline]. Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/corporate-governance-guideline-2018
Office of the Superintendent of Financial Institutions (OSFI). 2017 [revised 2022 Jul; effective 2023 Jan 1]. Guideline A-4: <i>Regulatory Capital and Internal Capital Targets</i> . Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/regulatory-capital-internal-capital-targets
Office of the Superintendent of Financial Institutions (OSFI). 2010. Guideline B-3: <i>Sound Reinsurance Practices and Procedures</i> . Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/sound-reinsurance-practices-procedures-guideline-2010
Office of the Superintendent of Financial Institutions (OSFI). 2023. Guideline B-15: <i>Climate Risk Management</i> . Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/climate-risk-management
Office of the Superintendent of Financial Institutions (OSFI). 2009. Guideline E-18: <i>Stress Testing</i> . Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/stress-testing-guideline-2009
Office of the Superintendent of Financial Institutions (OSFI). 2017 [effective 2018 Jan 1]. Guideline E-19: <i>Own Risk and Solvency Assessment</i> . Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/own-risk-solvency-assessment
<i>Insurance Companies Act</i> , SC 1991, c. 47. Sections 357-370.	https://laws-lois.justice.gc.ca/PDF/I-11.8.pdf
<i>Insurance Act</i> , RSO 1990, c. I.8. Parts V (Sections 171-196), VII (Sections 290-329).	https://www.ontario.ca/laws/statute/90i08#BK113
CIA Study Note: <i>Legal Aspects of Group Insurance in the Province of Québec</i> . 2023 ed.	Documentation will be provided by the CIA following the exam registration process.
Jones HE. 1992. <i>Canadian Life and Health Insurance Law</i> . Atlanta (GA): FLMI Insurance Education Program, Life Management Institute, LOMA. Chapters 16, 17.	Documentation will be provided by the CIA following the exam registration process.
Canadian Life and Health Insurance Association (CLHIA). 2016. Guideline G7: <i>Creditor's Group Insurance</i> . Toronto (ON): CLHIA.	https://www.clhia.ca/web/clhia_lp4w_ind_webstation.nsf/page/8ED833F2B02CD1EF85257841005B27FE/\$file/G7.pdf
Financial Consumer Agency of Canada. [modified 2022 Aug 4]. "Credit or loan insurance." Ottawa (ON): Government of Canada.	https://www.canada.ca/en/financial-consumer-agency/services/insurance/credit-loan.html

Canadian Life and Health Insurance Association (CLHIA). 2013. Guideline G3: <i>Group Life and Group Health Insurance</i> . Toronto (ON): CLHIA.	https://www.clhia.ca/web/CLHIA_LP4W_LND_Webstation.nsf/page/13CD6FF39333FBBE8525784F0058BAC4/\$file/G3.pdf
Financial Services Commission of Ontario (FSCO). 2017. Toronto (ON): FSCO. "All about beneficiaries."	https://www.fsrao.ca/fr/media/8196/download
Fasken. 2010. "Compagnie d'assurances Standard Life v. Tremblay 2010 QCCA 933: A hefty price to pay for unwarranted surveillance." <i>Lexology</i> . London (UK): Law Business Research.	https://www.lexology.com/library/detail.aspx?g=7d8778a2-6439-4814-8e25-36dd2255963f
Risi C. 2014. <i>Health and Life Insurance Case Law Update for Western Canada</i> . CLHI Legal Section Annual Meeting; 2014 Sep 17-19, Montebello (QC). Vancouver (BC): Bernard LLP.	https://www.bernardllp.ca/wp-content/uploads/2014/09/Western-Cdn-Case-Law-Update-2013-2014-Connie-Risi.pdf
Schjerner E. 2019. <i>LTD Case Law Update – Spring 2019</i> . Toronto (ON): Blaney McMurtry LLP. Section A.	https://www.blaney.com/articles/ltd-case-law-update-spring-2019?utm_source=Mondaq&utm_medium=syndication&utm_campaign=LinkedIn-integration

5. Workers' compensation (5%)

1. Outline and evaluate the following: (B5)
 - a. Social insurance programs governed by provincial legislation, with emphasis on prevention of workplace injuries, diseases, and fatalities.
 - b. Association of Workers' Compensation Boards of Canada (AWCBC).
 - c. Publicly insured programs vs. self-insured programs.
 - d. Integration of workers' compensation programs with private group insurance programs.
 - e. Unique aspects of disability management when disability arises from a cause covered under workers' compensation.

Reading Reference	Source
Shepell M. 2020. <i>Handbook of Canadian Pension and Benefits Plans</i> . 17th ed. Toronto (ON): LexisNexis. Chapter 18.	https://store.lexisnexis.ca/en/categories/shop-by-jurisdiction/promo-8/morneau-shepell-handbook-of-canadian-pension-and-benefit-plans-17th-edition-skusku-cad-6426/details
Association of Workers' Compensation Boards of Canada (AWCBC). 2023. Toronto (ON): AWCBC. "Detailed key statistical measures (KSM) report – 2021." 2021.	https://awcbc.org/en/statistics/ksm-annual-report/
Association of Workers' Compensation Boards of Canada (AWCBC). 2023. Toronto (ON): AWCBC. "Compensation 101."	https://awcbc.org/en/about/compensation-101/
Zaric S. 2022 Apr 7. "Everything you need to know about Canada workers' compensation." San Francisco (CA): Deel.	https://www.deel.com/blog/canada-workers-compensation

6. Public and other benefit programs (15%)

1. Analyze the impact of following public plans on group insurance: (C4)
 - a. Canada/Quebec Pension Plans.
 - b. Canada Health Act.
 - c. Provincial medical and drug plans.
 - d. Provincial automobile plans.
 - e. Employment Insurance.
 - f. Québec Parental Insurance Plan.
 - g. Québec Public Prescription Drug Insurance Plan.
 - h. National pharmacare initiative.
2. Evaluate how private group insurance plans work within the framework of public programs in Canada. (D5)
3. Perform calculations under the plans mentioned in 1. above. (C3)
4. Evaluate Government's role in health-care policy and regulation. (D5)

<p>5. Analyze financing and the flow of funds in the Canadian health-care system and the role of the provider and government. (D4)</p> <p>6. Describe variations in consumer behavior under the Canadian health system. (D2)</p>	
Reading Reference	Source
Shepell M. 2020. <i>Handbook of Canadian Pension and Benefits Plans</i> . 17th ed. Toronto (ON): LexisNexis. Chapters 2 (p. 52-61), 17.	https://store.lexisnexis.ca/en/categories/shop-by-jurisdiction/promo-8/morneau-shepell-handbook-of-canadian-pension-and-benefit-plans-17th-edition-skusku-cad-6426/details
Service Canada. 2021. <i>Canada Pension Plan Disability Benefit Toolkit</i> . Ottawa (ON): Government of Canada.	https://www.canada.ca/content/dam/canada/employment-social-development/programs/pension-plan-disability-benefits/reports/cpp-disability-toolkit-printable-EN.pdf
Tiedemann M. 2019. <i>The Canada Health Act: An Overview</i> [background paper]. Ottawa (ON): Library of Parliament.	https://lop.parl.ca/sites/PublicWebsite/default/en_CA/ResearchPublications/201954E
Canadian Life and Health Insurance Association (CLHIA). 2021. <i>Submission to the Government of Canada on Its Consultation on a National Strategy for High-Cost Drugs for Rare Diseases</i> . Toronto (ON): CLHIA.	https://www.clhia.ca/web/CLHIA_LP4W_LND_Webstation.nsf/page/145E2E16404AC493852586A700520712/\$file/Submission%20to%20the%20National%20Strategy%20for%20High%20Cost%20Drugs%20for%20Rare%20Diseases.pdf
Devlin RA. "A comparison of automobile insurance regimes in Canada." <i>Insur Risk Manag J</i> . 86(1-2): 55-96. p. 55-86.	https://www.revueassurances.ca/wp-content/uploads/2021/02/03_AGR_Vol_86_1-2_Art03_Devlin_Pro_web.pdf
Government of Canada. 2023. Ottawa (ON): Government of Canada. "EI sickness benefits: Do you qualify." [modified 2023 Feb 10].	https://www.canada.ca/en/services/benefits/ei/ei-sickness/qualify.html
Government of Canada. 2023. Ottawa (ON): Government of Canada. "EI sickness benefits: How much you could receive." [modified 2023 Jan 16].	https://www.canada.ca/en/services/benefits/ei/ei-sickness/benefit-amount.html
Government of Canada. 2023. Ottawa (ON): Government of Canada. "EI maternity and parental benefits: What these benefits offer." [modified 2022 Dec 30].	https://www.canada.ca/en/services/benefits/ei/ei-maternity-parental.html
Government of Canada. 2023. Ottawa (ON): Government of Canada. "EI maternity and parental benefits: Do you qualify." [modified 2022 Nov 25].	https://www.canada.ca/en/services/benefits/ei/ei-maternity-parental/eligibility.html
Government of Canada. 2023. Ottawa (ON): Government of Canada. "EI maternity and parental benefits: How much you could receive." [modified 2022 Dec 30].	https://www.canada.ca/en/services/benefits/ei/ei-maternity-parental/benefit-amount.html
Government of Québec. 2023. Montréal (QC): Government of Québec. "Québec Parental Insurance Plan: About the plan." [last updated 2020 Sep 22].	https://www.rqap.gouv.qc.ca/en/what-is-the-quebec-parental-insurance-plan
Government of Québec. 2023. Montréal (QC): Government of Québec. "Québec Parental Insurance Plan: Premiums and maximum insurable earnings." [last updated 2022 Nov 30].	https://www.rqap.gouv.qc.ca/en/about-the-plan/general-information/premiums-and-maximum-insurable-earnings
Government of Québec. 2023. Montréal (QC): Government of Québec. "Québec Parental Insurance Plan: Tables of benefits." [last updated 2021 Dec 15].	https://www.rqap.gouv.qc.ca/en/about-the-plan/tables-of-benefits
CIA Study Note: <i>The Quebec Act Respecting Prescription Drug Insurance and its Impacts on Private Group Insurance Plans</i> . 2023 ed.	Documentation will be provided by the CIA following the exam registration process.
CIA Public Statement: <i>Pharmacare: Is There a Pill for That?</i> .	https://www.cia-ica.ca/publications/221021e/
Health Canada. 2019. <i>A Prescription for Canada: Achieving Pharmacare for All</i> . Ottawa (ON): Government of Canada. p. 7-23.	https://www.canada.ca/content/dam/hc-sc/images/corporate/about-health-canada/public-engagement/external-advisory-bodies/implementation-national-pharmacare/final-report/final-report.pdf
Hurley J, Guindon GE. 2020. "Private health insurance in Canada." In: Thomson S, Sagan A, Mossialos E, editors. <i>Private Health Insurance: History, Politics and Performance</i> . Cambridge (UK): Cambridge University Press; p. 99-141. p. 130-136.	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/F7C98364E41439D3DF992CA52D095066/9780521125826c4_99-141.pdf/private-health-insurance-in-canada.pdf
Health Canada. [last modified 2019 Sep 17]. "Canada's health care system." Government of Canada. 2023. Ottawa (ON): Government of Canada.	https://www.canada.ca/en/health-canada/services/health-care-system/reports-publications/health-care-system/canada.html

Canadian Institute for Health Information (CIHI). 2023. <i>Health Expenditure Data in Brief</i> . Ottawa (ON): CIHI.	https://www.cihi.ca/sites/default/files/document/health-expenditure-data-in-brief-2023-en.pdf
Canadian Institute for Health Information (CIHI). 2023. Ottawa (ON): CIHI. "National health expenditure trends, 2021 – snapshot." 2021 Nov 4.	https://www.cihi.ca/en/national-health-expenditure-trends-2021-snapshot
Naylor CD, Boozary A, Adams O. 2020. "Canadian federal-provincial/territorial funding of universal health care: Fraught history, uncertain future." <i>CMAJ</i> . 192(45): E1408-1412.	https://www.cmaj.ca/content/cmaj/192/45/E1408.full.pdf
Closing the Gap Healthcare. [c2020]. Mississauga (ON): Closing the Gap Healthcare. "Healthcare in Ontario: How does it work and how is it funded?" 2018 May 30.	https://www.closingthegap.ca/healthcare-in-ontario-how-does-it-work-and-how-is-it-funded/
Canadian Medical Association: Virtual Care in Canada: discussion paper	https://www.cma.ca/sites/default/files/pdf/News/Virtual_Care_discussionpaper_v2EN.pdf

7. The US healthcare model (10%)

1. Understand the operations of various types of (public, private, or both) health-care models applicable in the United States and their financing: (B3)
 - a. Health Maintenance Organization (HMO).
 - b. Preferred Provider Organization (PPO).
 - c. Private Group Insurance Plans.
 - d. Affordable Care Act (ACA or Obamacare).
 - e. Medicare and Medicaid.
2. Differentiate the role of various players in the US system (networks, employers, insurers, actuaries) (B4)
3. Critique social programs in Canada and the US and discuss the value of the different systems. (B5)

Reading Reference	Source
Brown LD, Glied SA. 2020. "Regression to the increasingly mean? Private health insurance in the United States of America." In: <i>Private Health Insurance: History, Politics and Performance</i> . Thomson S, Sagan A, Mossialos E, editors. Cambridge (UK): Cambridge University Press. p. 494-520.	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/4725A074FB7F8ACEDA7E4D569764D9B8/9780521125826AR.pdf/Private_Health_Insurance.pdf?event-type=FTLA
Altman D, Cutler DM, Zeckhauser RJ. 2000. <i>Enrollee Mix, Treatment Intensity, and Cost in Competing Indemnity and HMO Plans</i> . Cambridge (MA): National Bureau of Economic Research. (NBER Working Paper Series, No. 7832).	https://www.nber.org/system/files/working_papers/w7832/w7832.pdf
Skwire DD. 2021. <i>Group Insurance</i> . 8th ed. Greenland (NH): ACTEX. Chapters 1, 5, 6 (p. 71-89), 7, 9 (p. 133-148), 16, 17, 19 (p. 299-314).	https://www.actexamdriver.com/orderselection.aspx?id=453147546
Pauly M. 2017. "Is Canada the right model for a better U.S. health care system?" <i>Knowledge at Wharton</i> . Philadelphia (PA): Wharton School of the University of Pennsylvania.	https://knowledge.wharton.upenn.edu/article/lessons-can-u-s-learn-canadian-health-care-system/

8. Other healthcare models (10%)

1. Understand the various types of (public, private, or both) health-care models: (B2)
 - a. Other countries of interest (such as the United Kingdom and China).
 - b. Developing country for health-care models (such as India).
2. Compare and contrast the role of various stakeholders in these systems (networks, employers, insurers, actuaries). (D5)

Reading Reference	Source
-------------------	--------

Thorlby R. 2020. "England." (International Health Care System Profiles). New York (NY): The Commonwealth Fund.	https://www.commonwealthfund.org/international-health-policy-center/countries/england
Fang H. 2020. "China." (International Health Care System Profiles). New York (NY): The Commonwealth Fund.	https://www.commonwealthfund.org/international-health-policy-center/countries/china
"Drugmakers cut prices by 62% on average to get China state insurance listing." 2021 Dec 3. Reuters. 2023. London (UK): Reuters.	https://www.reuters.com/business/healthcare-pharmaceuticals/drugmakers-cut-prices-by-62-average-get-china-state-insurance-listing-2021-12-03/
Lu C-F, Zhang D, Gao J. "China on the move: Lesson from China's national negotiation of drug prices in 2021." GreenbergTraurig. 2023. Miami (FL): Greenberg-Taurig.	https://www.gtlaw.com/en/insights/2022/2/china-on-the-move-lesson-from-chinas-national-negotiation-of-drug-prices-in-2021
Gupta I. 2020. "India." (International Health Care System Profiles). New York (NY): The Commonwealth Fund.	https://www.commonwealthfund.org/international-health-policy-center/countries/india
Diaz MDM, Haber N, Mladovsky P, Pitchforth E, Saleh WF, Sarti FM. "Private health insurance in Brazil, Egypt and India." In: <i>Private Health Insurance: History, Politics and Performance</i> . Thomson S, Sagan A, Mossialos E, editors. Cambridge (UK): Cambridge University Press. p. 65-98 and p. 85-94.	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/4725A074FB7F8ACEDA7E4D569764D9B8/9780521125826AR.pdf/Private_Health_Insurance.pdf?event-type=FTLA

Exam F2GB: Group Benefits Product Pricing

The aim of this exam is for candidates to develop the following skills:

1. Understand the main principles and techniques of pricing that are relevant to group insurance, including techniques to estimate the key components of a technical price.
2. Apply these principles and techniques within the context of group insurance.
3. Evaluate hypothetical scenarios, including using judgment to assess the implications of possible actions and to develop appropriate proposals or recommendations relating to pricing group insurance products.

1. Principal terms	
1. Define principal terms used in group benefits and health insurance pricing. (A1)	
Reading Reference	Source
Canadian Life and Health Insurance Association (CLHIA). 2023. Toronto (ON): CLHIA. "Glossary of insurance terms."	https://www.clhia.ca/web/CLHIA_LP4W_LND_Webstation.nsf/page/FF801CA8A20C46568525780E00665851!OpenDocument

2. Experience studies and predictive modelling (20%)
<ol style="list-style-type: none"> 1. Explain and apply the relevancy and limitations of actuarial experience studies available for group insurance (industry tables and information: life mortality, waiver of premiums, long-term disability [LTD] termination, rate comparisons, expense benchmarks, Life Insurance Market Research Association, etc.). (C3) 2. Relative to 1., explain reasons for selecting applicable tables and their sources and characteristics: (D2) <ol style="list-style-type: none"> a. CIA, Krieger, GLTD, CPP, QPP. b. LTD incidence rates (Have and Garand). 3. Compare and contrast the differences between the CIA's Predictive Analytics Model for Canadian Group Disability Termination Experience and the Group Long-term Disability Termination Study. (D5) 4. Evaluate the relevancy and limitations of non-actuarial experience studies available for group insurance, such as Régie de l'assurance maladie du Québec (RAMQ) data for prescription drugs. (D5) 5. Analyze the sources, relevancy, and limitations of trends and forecasts studies available for group insurance (economic forecasts, disability incidence, and health-trend data) for the following: (C4)

<ol style="list-style-type: none"> a. RAMQ data for prescription drugs. b. Economic trends published quarterly by chartered banks. c. Annual drug-trend studies produced by pharmacy benefits managers. d. Annual health-care-cost-trend studies by major consulting firms. <ol style="list-style-type: none"> 6. Perform calculations for claims models for various types of coverage: (C3) <ol style="list-style-type: none"> a. Models for health and dental benefits. b. Models for stop-loss claims. 7. Outline expense models for various types of coverage. (B2) 8. Describe how predictive modelling techniques can be used for claims analytics. (C3) 	
Reading Reference	Source
CIA Study: <i>Group Life Mortality Study for 1989-1991</i> .	Documentation will be provided by the CIA following the exam registration process.
CIA Study: <i>Group Life Waiver Study Based on 2009–2015 Canadian Group LTD Termination Experience Report</i> .	https://www.cia-ica.ca/publications/220015e/ and Excel document 220015t: https://www.cia-ica.ca/publications/220015te/
RAMQ ORIS TOOL (search engine inside the RAMQ database) AM-09 RAMQ Table 2021	https://www4.prod.ramq.gouv.qc.ca/IST/CD/CDF_DifsInfoStats/CDF1_CnsulInfoStatsCNC_iut/DifsInfoStats.aspx?ETAPE_COUR=2#PosMiddleTab
CIA Proceedings: <i>Session 41: Long-Term Disability Trends in Canada and the US</i> [presentation]. CIA Annual Conference; 2018.	Documentation will be provided by the CIA following the exam registration process.
CIA Proceedings: <i>LTD Termination Rates, Predictive Analytics and Life Waiver</i> [presentation]. CIA Annual Conference; 2020.	Documentation will be provided by the CIA following the exam registration process.
SOA Report: <i>Report of the SOA Group Life Insurance Experience Committee</i> .	https://www.soa.org/globalassets/assets/Files/Research/Exp-Study/research-05-gl-waiver.pdf
Canadian Institute for Health Information (CIHI). 2011. <i>Health Care Cost Drivers: The Facts</i> . Ottawa (ON): CIHI.	https://secure.cihi.ca/free_products/health_care_cost_drivers_the_facts_en.pdf
Bank of Canada. 2022. <i>Monetary Policy Report</i> . Ottawa (ON): Bank of Canada.	https://www.bankofcanada.ca/wp-content/uploads/2022/07/mpr-2022-07-13.pdf
Express Scripts Canada. 2022. <i>2022 Prescription Drug Trend Report</i> . Mississauga (ON): Express Scripts Canada.	https://www.express-scripts.ca/sites/default/files/2022-04/ExpressScriptsCanada2022DrugTrendReport.pdf
Aon, Global Benefits. 2021. <i>2021 Global Medical Trend Rates Report</i> . London (UK): Aon.	https://insights-north-america.aon.com/research/2021-global-medical-trend-rates-report
CIA/SOA Research Paper: <i>Model of Long-Term Health Care Cost Trends in Canada</i> .	https://www.cia-ica.ca/publications/218034e/
Skwire DD. 2021. <i>Group Insurance</i> . 8th ed. Greenland (NH): ACTEX. Chapters 20 (p. 317-321), 26, 29 (p. 502-503), 35, 36 (p. 624-626).	https://www.actexamdriver.com/orderselection.aspx?id=453147546
CIA/SOA Research Paper: <i>The Use of Predictive Analytics in the Canadian Life Insurance Industry</i> .	https://www.cia-ica.ca/publications/219050e/
CIA/SOA Research Paper: <i>The Application of Credibility Theory in the Canadian Life Insurance Industry</i> .	https://www.cia-ica.ca/publications/219120e/

3. Credibility (10%)

1. Explain and outline the principles underlying the notion of credibility in group insurance. (D2)
2. Explain the variability of the notion of credibility in the group insurance market. (C2)
3. Analyze the factors affecting the credibility of a particular group (statistical heterogeneity, etc.). (B4)
4. Assess utilization of industry statistics and company experience. (C5)
5. Develop and apply credibility formulae to relevant calculations. (C4)

6. Evaluate credibility in the context of predictive models (C5). 7. Compare traditional actuarial models with predictive modelling techniques. (C4)	
Reading Reference	Source
CIA/SOA Research Paper: <i>The Application of Credibility Theory in the Canadian Life Insurance Industry</i> .	https://www.cia-ica.ca/publications/219120e/
SOA Research Report: <i>A Practical Approach to Assigning Credibility for Group Medical Insurance Pricing</i> .	https://www.soa.org/globalassets/assets/Files/Research/research-2015-practical-approach-assigning-credibility-group-medical.pdf
CIA Study Note: <i>Experience Rating</i> .	Documentation will be provided by the CIA following the exam registration process.
Skwire DD. 2021. <i>Group Insurance</i> . 8th ed. Greenland (NH): ACTEX. Chapters 26, 42.	https://www.actexamdriver.com/orderselection.aspx?id=453147546
SOA Research Report: <i>Issues in Applying Credibility to Group Long-Term Disability Insurance</i> .	https://www.soa.org/globalassets/assets/Files/Research/Projects/research-2013-iss-in-app-cred.pdf

4. Capital requirements (15%)

- Describe the principles underlying the determination of regulatory capital, in particular OSFI's Life Insurance Capital Adequacy Test (LICAT), including the following: (C4)
 - Identification of significant risk components.
 - Identification of specialized product LICAT requirements.
 - Interpreting results from a regulatory perspective.
- Outline and calculate the capital impacts of funding structures (refund accounting with claims fluctuation reserves, stop-loss, large amount pooling, hold-harmless agreements, etc.). (C4)

Reading Reference	Source
CIA Educational Note: <i>Guidance for the 2022 Valuation of Insurance Contract Liabilities of Life Insurers</i> .	https://www.cia-ica.ca/publications/222117e/
CIA Educational Note: <i>IFRS 17 Risk Adjustment for Non-Financial Risk for Life and Health Insurance Contracts</i> .	https://www.cia-ica.ca/publications/222090e/
CIA Educational Note: <i>IFRS 17 Measurement and Presentation of Canadian Participating Insurance Contracts</i> .	https://www.cia-ica.ca/publications/222093e/
Office of the Superintendent of Financial Institutions (OSFI). 2017 [revised 2022 Jul; effective 2023 Jan 1]. Guideline A-4: <i>Regulatory Capital and Internal Capital Targets</i> . Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/regulatory-capital-internal-capital-targets
Office of the Superintendent of Financial Institutions (OSFI). 2023 [date 2024 Jan 1]. Guideline A: <i>Life Insurance Capital Adequacy Test</i> . Sections 6.8.2, 6.8.3. Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/life-insurance-capital-adequacy-test-guideline-2024

5. Product pricing (25%)

- Outline and apply the underwriting process. (C3)
- Evaluate how predictive analytics techniques can be used to estimate trends. (D5)
- Identify risk-mitigation strategies (such as pre-existing condition exclusions). (B2)
- Analyze the features, provisions, and pricing structures of flexible benefits. (C4)
- Identify, compare, and contrast pricing variables relevant to group insurance by product (demographic variables, variables that vary from one group to another, variables that vary from one insurer to another, economic variables, etc.). (D5)
- Apply relevant standards of practice. (C3)
- Create a medical-cost-trend experience analysis. (C6)
- Develop and recommend assumptions. (C6)

<p>9. Calculate and recommend a manual rate. (D6)</p> <p>10. Apply critical metrics to evaluate actual vs. expected results. (C3)</p>	
Reading Reference	Source
Shepell M. 2020. <i>Handbook of Canadian Pension and Benefits Plans</i> . 17th ed. Toronto (ON): LexisNexis. Chapters 22 (p. 547-548), 25, 26.	https://store.lexisnexis.ca/en/categories/shop-by-jurisdiction/promo-8/morneau-shepell-handbook-of-canadian-pension-and-benefit-plans-17th-edition-skusku-cad-6426/details
Skwire DD. 2021. <i>Group Insurance</i> . 8th ed. Greenland (NH): ACTEX. Chapters 20-26.	https://www.actexamdriver.com/orderselection.aspx?id=453147546
CIA Standards of Practice. Parts 1000, 2000.	https://www.cia-ica.ca/being-a-member/standards-of-practice/
Mercer Marsh Benefits. 2021. <i>MMB Health Trends: Managing the Cost and Risk of Employer-Provided Healthcare in a Changing World</i> . Vancouver (BC): Mercer (Canada).	https://www.mercer.ca/content/dam/mercercanada/attachments/north-america/canada/ca-en-2022-mmb-health-trends-report.pdf

6. Profitability measures (10%)	
<p>1. Outline and calculate the following profitability measures: (C3)</p> <ol style="list-style-type: none"> Return on capital. Return on equity. Percent of premium. Percent of assets. Earnings per share. Types of embedded value ("traditional," "European," "market consistent"). <p>2. Outline and explain the uses of embedded value. (B5)</p> <p>3. Outline and explain the sources of earnings. (B5)</p> <p>4. Perform benchmarking. (C5)</p>	
Reading Reference	Source
Great-West Lifeco, Manulife, Sun Life. 2022. <i>Overview of Earnings Presentation and Reporting under the New IFRS 17 Accounting Standard</i> . Winnipeg (MB): Great-West Lifeco.	https://www.greatwestlifeco.com/content/dam/gwlco/documents/ev-ents/2022/ifrs-17-presentation.pdf
Skwire DD. 2021. <i>Group Insurance</i> . 8th ed. Greenland (NH): ACTEX. Chapters 20-26.	https://www.actexamdriver.com/orderselection.aspx?id=453147546
Office of the Superintendent of Financial Institutions (OSFI). 2023. Ottawa (ON): OSFI. "Financial data for life insurance companies" [searchable database]. Income statement and assets, liabilities and surplus. (Candidates should download Canadian Life Q4 data for 2021, 2020, 2019 and 2018.)	https://www.osfi-bsif.gc.ca/en/data-forms/financial-data/financial-data-life-insurance-companies
CIA Study Note: <i>Earnings per Share</i> .	Documentation will be provided by the CIA following the exam registration process.
CFO Forum. 2016. <i>European Embedded Value Principles</i> . [place unknown]: CFO Forum.	https://cfoforum.eu/mediaitem/587a904d-c334-4de7-b2ca-c09dc2304814/CFO-Forum_EEV_Principles_and_Guidance_April_2016.pdf
Manulife. 2021. <i>2021 Embedded Value Report for Manulife's Insurance Businesses</i> . Toronto (ON): Manulife.	https://www.manulife.com/content/dam/corporate/en/documents/investors/MFC_EVR_2021_Y1_EN.pdf
Swiss Re. 2005. <i>Swiss Re Group's Life and Health Business Embedded Value and Embedded Value Earnings for the Year Ended 31 December 2005</i> . Zurich (CH): Swiss Re.	Documentation will be provided by the CIA following the exam registration process.
CIA Session PD-23: <i>Embedded Value and Value of New Business</i> . 38(2). CIA Annual Meeting; 2007.	Documentation will be provided by the CIA following the exam registration process.
CIA Educational Note: <i>Sources of Earnings Calculations — Group Life and Health</i> .	https://www.cia-ica.ca/publications/210069e/

Canadian Life and Health Insurance Association (CLHIA). 2022. <i>Canadian Life and Health Insurance Facts</i> . Toronto (ON): CLHIA.	https://www.clhia.ca/web/CLHIA_LP4W_LND_Webstation.nsf/resources/Factbook2022/\$file/2022+CLHIA+Fact+book+EN.pdf
Canadian Life and Health Insurance Association (CLHIA). Excel Appendices from 2022, 2021, 2020, 2019 and 2018.	Documentation will be provided by the CIA following the exam registration process.

7. Financial arrangements in a group insurance plan (10%)

1. Compare and contrast the main features and benefits of financial arrangements (pooling, retention, hold-harmless, and self-insurance). (C4)
2. Identify and analyze issues associated with self-insurance. (B4)
3. Perform calculations relative to 1. and 2. above. (C3)

Reading Reference	Source
Shepell M. 2020. <i>Handbook of Canadian Pension and Benefits Plans</i> . 17th ed. Toronto (ON): LexisNexis. Chapter 25	https://store.lexisnexis.ca/en/categories/shop-by-jurisdiction/promo-8/morneau-shepell-handbook-of-canadian-pension-and-benefit-plans-17th-edition-skusku-cad-6426/details
Rosenbloom, 2011. <i>The Handbook of Employee Benefits: Health and Group Benefits</i> 7/E, Chapters 29,30	https://bookshelf.vitalsource.com/#/user/signin
Skwire DD. 2021. <i>Group Insurance</i> . 8th ed. Greenland (NH): ACTEX. Chapter 26.	https://www.actexmadriver.com/orderselection.aspx?id=453147546

8. Insurance company taxation (10%)

1. Describe the following insurance company taxation features: (B2)
 - a. Tax reserves.
 - b. Investment income tax (IIT).
 - c. Income tax.
 - d. Claims fluctuation reserve (CFR) allowable; and
 - e. Premium taxes.
2. Perform calculations relative to 1. above. (C3)

Reading Reference	Source
PricewaterhouseCoopers (PwC) Canada. 2021. <i>Insurance Industry: Key Tax Rates and Updates</i> . Toronto (ON): PwC.	https://www.pwc.com/ca/en/insurance/publications/insurance-industry-key-tax-rates-and-updates-2021-en.pdf
Swales J, Erinc E. 2015. <i>Canadian Insurance Taxation</i> . 4th ed. Toronto (ON): LexisNexis.	
Income for Tax Purposes (p.37-38, 43-47) Chapter 6: Reserves (Life Insurers) (p. 79-96) Chapter 8: Taxable Income and Income Tax (Life Insurers) Chapter 9: Investment Income Tax (Life Insurers) (p.135-142)	https://www.actexmadriver.com/product.aspx?id=453097139
CIA Study Note: <i>Taxation of Employee Benefits (Group Insurance) in Canada</i> . 2023 ed.	Documentation will be provided by the CIA following the exam registration process.

Exam F3GB: Group Benefits Reserving

The aim of this exam is for candidates to develop the following skills:

1. Understand the main principles and techniques for estimating reserves and claims-related expenses that are relevant to group insurance.
2. Apply these principles and techniques within the context of group insurance.
3. Evaluate the considerations involved in selecting a best-estimate reserve.
4. Understand how reserves link to wider business processes (e.g., business planning, pricing, financial reporting, and capital setting).
5. Describe reporting requirements and calculate actuarial values for financial reporting.
6. Evaluate hypothetical scenarios, including using judgment to assess the implications of possible actions.

1. Principal terms	
1. Define principal terms used in the valuation of reserves and financial reporting for group insurers. (A1).	
Reading Reference	Source
CIA Educational Note: <i>Valuation of Group Life and Health Policy Liabilities</i> . Glossary.	https://www.cia-ica.ca/publications/210034e/
2. Reserving and claim liabilities (35%)	
<ol style="list-style-type: none"> 1. Outline the various uses of reserving (life insurance company financial reporting, reporting to client on refund accounting, pricing, etc.) and evaluate their impact on the selection of methods and assumptions. (B5) 2. Apply the Canadian Asset Liability Method (CALM). (C3) 3. Evaluate the impact of IFRS 17 on group insurance reserving. (C5) 4. Apply the applicable standards of practice (SOP). (C3) 5. Identify the applicable educational notes. (A2) 6. Understand, calculate, and evaluate provisions for adverse deviations (PfADs). (C5) 7. Compare and contrast aggregate and seriatim approaches. (B5) 8. Describe current tables/studies used in valuation (CIA experience analyses, group long-term disability (GLTD), Krieger, SOA tables, etc.). (B2) 9. Perform calculations for waiver of premiums (WP). (C3) 10. Perform calculations for LTD (disabled reserves). (C3) 11. Perform calculations for non-traditional approaches (WP and LTD reserves based on medical prognosis, etc.). (C3) 12. Perform calculations for incurred but not reported (IBNR) reserves (including the chain-ladder method). (C3) 13. Perform analysis on different reserving methods. (C4) 14. Evaluate stochastic approaches to calculation of group insurance reserves. (C5) 15. Evaluate stop-loss reserves reflecting timing mismatch between premium and claims. (C5) 16. Explain the limitations and biases of the traditional valuation methods. (C2) 17. Evaluate data resources and appropriateness for calculating reserves. (C5) 18. Describe the role and responsibilities of the appointed/valuation actuary. (B2) 	
Reading Reference	Source
CIA Educational Note: <i>Valuation of Group Life and Health Policy Liabilities</i> .	https://www.cia-ica.ca/publications/210034e/
Skwire DD. 2021. <i>Group Insurance</i> . 8th ed. Greenland (NH): ACTEX. Chapter 37.	https://www.actexamdriver.com/orderselection.aspx?id=453147546

CIA Standards of Practice. Part 2000, except Section 2600.	https://www.cia-ica.ca/being-a-member/standards-of-practice/
CIA Educational Note: <i>Financial Condition Testing</i> .	https://www.cia-ica.ca/publications/220057e/
CIA Standards of Practice. Paragraphs 1120.40, 1120.54, 1620.02, 1630, 1710.01.	https://www.cia-ica.ca/being-a-member/standards-of-practice/
CIA Educational Note: <i>Valuation of Group Life and Health Policy Liabilities</i> . Sections 6, 7 (p. 14-19).	https://www.cia-ica.ca/publications/210034e/
CIA Study: <i>Group Life Waiver Study Based on 2009–2015 Canadian Group LTD Termination Experience Report</i> .	https://www.cia-ica.ca/publications/220015e/
CIA Study: <i>Group Long-Term Disability Termination Study</i> .	https://www.cia-ica.ca/publications/219012e/
Skwire DD. 2021. <i>Group Insurance</i> . 8th ed. Greenland (NH): ACTEX. Chapters 11, 21 (p. 330-337), 24, 38, 39, 40.	https://www.actexamdriver.com/orderselection.aspx?id=453147546
Weindorfer B. 2012. <i>A Practical Guide to the Use of the Chain-Ladder Method for Determining Technical Provisions for Outstanding Reported Claims in Non-life Insurance</i> . Vienna (AT): University of Applied Sciences bfi Vienna. (Working Paper Series, No. 77).	https://www.fh-vie.ac.at/uploads/WP-077_2012.pdf
Office of the Superintendent of Financial Institutions (OSFI). 2023. <i>IFRS 17 Life Memorandum to the Appointed Actuary</i> . Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/data-forms/reporting-returns/filing-financial-returns/financial-reporting-instructions/ifrs-17-life-memorandum-appointed-actuary-2023

3. Benefit taxation (15%)

1. Describe the following benefit taxation features and perform related calculations: (C4)
 - a. Income tax – federal (including relevant folios and interpretation bulletins).
 - b. Income tax – provincial (including differences with federal income tax).
 - c. Premium sales taxes and similar taxes.
 - d. Other premium taxes.
2. Describe and perform calculations to evaluate the impact of taxation on: (C5)
 - a. Claims.
 - b. Plan design, including flexible benefits plans.
 - c. Plan funding (cross-experience rating, cost sharing, etc.).
3. Describe and perform calculations relative to alternate benefit funding structures such as (C3):
 - a. Administrative services only (ASO).
 - b. Employee life and health trusts.

Reading Reference	Source
Shepell M. 2020. <i>Handbook of Canadian Pension and Benefits Plans</i> . 17th ed. Toronto (ON): LexisNexis. Chapters 20 (p. 513-514), 22 (p. 552-553), 21 (p. 258-529), 26 (p. 600-602).	https://store.lexisnexis.ca/en/categories/shop-by-jurisdiction/promo-8/morneau-shepell-handbook-of-canadian-pension-and-benefit-plans-17th-edition-skusku-cad-6426/details
Aon Canada. 2020. <i>Canadian Benefits Guide 2020</i> . Toronto (ON): Aon Canada. "Group insurance taxation."	https://www.aon.com/canada/insights/canadianbenefitsguide.jsp
CIA Study Note: <i>Taxation of Employee Benefits (Group Insurance) in Canada</i> . 2023 ed.	Documentation will be provided by the CIA following the exam registration process.
Revenu Québec. 2021. <i>Taxable Benefits</i> . Québec City (QC): Revenu Québec. Section 4.1 (p. 30-36).	https://www.revenuquebec.ca/documents/en/publications/in/IN-253-V%282021-11%29.pdf
Sun Life. 2021. <i>Canadian Health Insurance Tax Guide: Employee Life and Health Trusts</i> . Toronto (ON): Sun Life.	https://suncentral.sunlife.ca/content/dam/sunlife/regional/canada/documents/insurance-solutions/employee-life-health-trusts-en.pdf

4. Employee benefits accounting (15%)

1. Compare post-retirement benefits vs. benefits while not actively at work. (B4)
2. Evaluate actuarial aspects of accounting for employee future benefits: (D5)
 - a. Canadian accounting recommendations under IAS 19.
 - b. CPA section 3462–3463 (private sector and not-for-profit).
 - c. CPA 3250, and CPA 3255 (public sector) plus non-Canadian accounting recommendations (Accounting Standards Codification [ASC]) 715/712 – U.S. regarding employee future benefits.
3. Calculate actuarial liabilities and other accounting items related to employee future benefits. (C3)
4. Apply CIA practice-specific standards to employee benefits. (C3)
5. Analyze the following issues related to post-employment benefits: (D4)
 - a. Why employers offer post-retirement and post-employment benefits.
 - b. Cost inflation.
 - c. Selection.
 - d. Reasonability of assumptions.

Reading Reference	Source
Shepell M. 2020. <i>Handbook of Canadian Pension and Benefits Plans</i> . 17th ed. Toronto (ON): LexisNexis. Chapter 24.	https://store.lexisnexis.ca/en/categories/shop-by-jurisdiction/promo-8/morneau-shepell-handbook-of-canadian-pension-and-benefit-plans-17th-edition-skusku-cad-6426/details
BDO Canada. 2020. <i>ASPE - IFRS: A Comparison: Employee Benefits</i> . Toronto (ON): BDO Canada.	https://www.bdo.ca/getmedia/07716c51-7ca2-4564-a38e-e8396b026bcd/ASPE_IFRS-Comparison_Employee-Benefits.pdf
Chartered Professional Accountants (CPA) Canada. 2021. <i>Accounting Standards for Private Enterprises (ASPE) Briefing: Section 3462, Employee Future Benefits: A Focus on Defined Benefit Plans</i> . Toronto (ON): CPA Canada.	https://www.cpacanada.ca/en/business-and-accounting-resources/financial-and-non-financial-reporting/accounting-standards-for-private-enterprises-aspe/publications/aspe-section-3462-defined-benefit-plans
Chartered Professional Accountants (CPA) Canada. 2023. <i>CPA Canada Handbook – Accounting</i> . Toronto (ON): CPA Canada. Part III (Section 3463).	https://www.cpastore.ca/Catalogue/ShowSampleToc.aspx?productID=137&splD=63
CIA Standards of Practice. Part 6000.	https://www.cia-ica.ca/being-a-member/standards-of-practice/
CIA. Session 28: <i>Tidal Forces Shaping Canadian Drug Spending</i> [presentation]. CIA Annual Conference; 2020	Documentation will be provided by the CIA following the exam registration process.
SOA Risk Chart: <i>Managing Post-Retirement Risk: A Guide to Retirement Planning</i> . p. 4-17.	https://www.soa.org/globalassets/assets/files/research/projects/post-retirement-charts.pdf

5. Insurance company financial reporting (10%)

1. Generate a basic financial statement and its components, including the impact of IFRS 17. (C6)
2. Describe the following concepts and perform relevant calculations: (C3)
 - a. Canada Annual Statement: statements, key exhibits, and schedules.
 - b. Taxable income.
 - c. Fair-value accounting principles.
 - d. International accounting standards.
 - e. Actuarial reviews of reserves.
3. Apply the IFRS 17 general method approach, variable fee approach, and premium allocation approach. (C3)

Reading Reference	Source
Skwire DD. 2021. <i>Group Insurance</i> . 8th ed. Greenland (NH): ACTEX. Chapters 37, 43.	https://www.actexamdriver.com/orderselection.aspx?id=453147546
Office of the Superintendent of Financial Institutions (OSFI). 2023. <i>IFRS 17 Life Memorandum to the Appointed Actuary</i> . Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/data-forms/reporting-returns/filing-financial-returns/financial-reporting-instructions/ifrs-17-life-memorandum-appointed-actuary-2023
Swales J, Erinc E. 2015. <i>Canadian Insurance Taxation</i> . 4th ed. Toronto (ON): LexisNexis. Chapter 8.	https://www.actexamdriver.com/OrderSelection.aspx?terms=Jason%20Swales
Office of the Superintendent of Financial Institutions (OSFI). 2016 [revised 2022 Apr., effective 2023 Jan] IFRS 9 Financial Instruments and Disclosures. Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/ifrs-9-financial-instruments-disclosures
Rehbeli L. <i>Brief Update on IAN100</i> [presentation]. CIA: Appointed Actuary Virtual Seminar; 2021.	Documentation will be provided by the CIA following the exam registration process.
Office of the Superintendent of Financial Institutions (OSFI). 2023. <i>IFRS 17 Life Memorandum to the Appointed Actuary – 2023</i> . Ottawa (ON): OSFI. Sections B-3 and B-4.	https://www.osfi-bsif.gc.ca/en/data-forms/reporting-returns/filing-financial-returns/financial-reporting-instructions/ifrs-17-life-memorandum-appointed-actuary-2023#b.4
CIA Educational Note: <i>Application of IFRS 17 Insurance Contracts</i> . p. 35-149.	https://www.cia-ica.ca/publications/221117e/

6. Financial and capital management (10%)

1. Differentiate surplus management and earnings management (D4).
2. Describe creation of value from a financial economics perspective (C4).
3. Relative to economic capital,
 - a. analyze the significant risk components; (C4)
 - b. select calculation methods appropriate to stakeholders' perspectives; and (D3)
 - c. describe how a company would implement an economic cap. (C5)
4. Evaluate the use of reinsurance as a capital management technique. (D5)

Reading Reference	Source
Kischuk RK. 1986. "Strategic management of life insurance company surplus." <i>Transactions of Society of Actuaries</i> . 38: 105-144.	https://www.soa.org/globalassets/assets/library/research/transactions-of-society-of-actuaries/1986/january/tsa86v387.pdf
CIA Educational Note: <i>Sources of Earnings Calculations — Group Life and Health</i> .	https://www.cia-ica.ca/publications/210069e/
Manulife. 2020. <i>2020 Embedded Value Report for Manulife's Insurance Businesses</i> . Toronto (ON): Manulife.	https://www.manulife.com/content/dam/corporate/investors/MFC_EVR_2020_Y1_EN.pdf
Office of the Superintendent of Financial Institutions (OSFI). 2017 [revised 2022 Jul; effective 2023 Jan 1]. Guideline A-4: <i>Regulatory Capital and Internal Capital Targets</i> . Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/regulatory-capital-internal-capital-targets
Office of the Superintendent of Financial Institutions (OSFI). 2023 [effective 2024 Jan 1]. Guideline A: <i>Life Insurance Capital Adequacy Test</i> . Ottawa (ON): OSFI. Sections 3.1-3.7, 5.1.1, 5.1.2, 6.1, 6.4.	https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/life-insurance-capital-adequacy-test-guideline-2024
The Canada Life Assurance Company. 2022. <i>2021 Annual Report</i> . Winnipeg (MB): The Canada Life Assurance Company. Note 8 (p. 30-37).	https://www.canadalife.com/content/dam/canadalife/documents/corporate/annual-reports/canada-life-2021-annual-report.pdf
Painter RA, Isaac D. 2007 May. "A multi-stakeholder approach to capital adequacy." <i>The Actuarial Practice Forum</i> .	https://www.soa.org/globalassets/assets/library/journals/actuarial-practice-forum/2007/may/APF0705_01.pdf
SOA Research Report: <i>Economic Capital for Life Insurance Companies</i> .	https://www.soa.org/493868/globalassets/assets/files/research/projects/research-2016-economic-capital-life-insurance-report.pdf
Comerford E, Fulcher P, van Beers R, Maher R. 2020 Jul 7. "Reinsurance as a capital management tool for life insurers." Milliman. 2023. Seattle (WA): Milliman.	https://us.milliman.com/en/insight/reinsurance-as-a-capital-management-tool-for-life-insurers

7. Asset and liability management (15%)

1. Compare and contrast asset models. (D5)
2. Compare and contrast asset allocation across the various lines of business of an insurer. (D5)
3. Outline the selection process of assets for backing group insurance liabilities. (C3)
4. Describe and apply the relationship between interest rate guarantees on refund arrangements and selection of assets. (C3)
5. Compare and contrast the relationship between asset liability management (ALM) at the corporate level and ALM at the line-of-business level. (C4)
6. Analyze liability models related to group insurance. (C4)
7. Interpret and develop appropriate presentation of results. (C6)
8. Evaluate the impacts of interest-crediting rates on pricing for new business. (C5)
9. Evaluate the impacts of interest-crediting rates on valuation of liabilities. (C5)
10. Assess risk margins related to the rate of return of assets. (C5)

Reading Reference	Source
SOA Research Paper: <i>Dynamic Financial Models of Life Insurers</i> .	https://www.soa.org/Files/Research/Projects/dynamic.pdf
Income Research + Management. 2021. <i>Insurance Company Fixed Income Portfolio Trends – 2021</i> . Boston (MA): Income Research + Management.	https://www.incomeresearch.com/insurance-company-fixed-income-portfolio-trends-2021/
Maginn JL, Tuttle DL, Pinto JE, McLeavey DW, editors. 2007. <i>Managing Investment Portfolios: A Dynamic Process</i> . 3rd ed. Hoboken (NJ): Wiley. Chapters 3 (p. 101-120), 5 (Sections 1-7, 9, 10).	https://www.actexamdriver.com/orderselection.aspx?id=453147610
Skwire DD. 2021. <i>Group Insurance</i> . 8th ed. Greenland (NH): ACTEX. Chapters 20, 26.	https://www.actexamdriver.com/orderselection.aspx?id=453147546
Gilbert C. 2016. "Chapter 13 – Asset liability management techniques and practices for insurance companies." In: <i>IAA Risk Book</i> . Ottawa (ON): International Actuarial Association (IAA).	https://www.actuaries.org/IAA/Documents/Publications/RiskBook/IAARiskBook_AssetLiabilityMgmt_2016-10.pdf
Pitacco E. 2014. <i>Health Insurance: Basic Actuarial Models</i> . New York (NY): Springer. Chapter 5.	https://link.springer.com/book/10.1007/978-3-319-12235-9
Office of the Superintendent of Financial Institutions (OSFI). 2023. <i>IFRS 17 Life Memorandum to the Appointed Actuary</i> . Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/data-forms/reporting-returns/filing-financial-returns/financial-reporting-instructions/ifrs-17-life-memorandum-appointed-actuary-2023
Office of the Superintendent of Financial Institutions (OSFI). 2023. <i>Guideline A: Life Insurance Capital Adequacy Test (2024)</i> . Ottawa (ON): OSFI.	https://www.osfi-bsif.gc.ca/en/guidance/guidance-library/life-insurance-capital-adequacy-test-guideline-2024
Waszink H. 2013. <i>Considerations on the Discount Rate in the Cost of Capital Method for the Risk Margin</i> . 2013 ASTIN Colloquium; 2013 May 21-24, The Hague (NL).	https://www.actuaries.org/ASTIN/Colloquia/Hague/Papers/Waszink.pdf