GH 201-C Model Solutions
March 2026

1. Learning Objectives:

1. The candidate will understand how to apply valuation principles for group and health insurance contracts.

Learning Outcomes:

(1a) Describe the types of claim reserves.

(1b) Explain the limitations and biases of the traditional valuation methods.

(1c) Calculate appropriate claim reserves given data.

(1g) Apply applicable best practices related to reserving.

Sources:

GH201-100-25: Health Reserves

Canadian Institute of Actuaries Standards of Practice - Insurance, Jun 2024, sections 1400, 1510, 1700, 2100, 2200 and 2300

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a) Describe four methods for estimating claim reserves.

Commentary on Question:

Most candidates received full credit by providing adequate descriptions to at least 4 methods. Credit was not awarded for the "Stochastic Method", as stochastic techniques are modifications to other methods, not a distinct method themselves.

Case reserves (examiner's method)

- This method develops reserves by estimating the ultimate claims amount for each reported claim and then subtracting the amount already paid against the claims.
- This method is most often employed to develop claims estimate for large catastrophic medical claims or for liabilities associated with litigated claims.

1. Continued

- Projection methods
    - Projection methods estimate incurred claims by developing an historical claim rate as a function of membership or other measures of exposures or liabilities. Reserves are estimated by:
        1. Developing a projected incurred claims cost per unit of exposure
        2. Multiplying this value times the exposure base for each period being estimated
        3. Subtraction of known paid claims

Loss ratio methods

- This is a form of projection method in which the estimate is based on anticipated loss ratios.
- The reserves are estimated by:
    1. Developing a projected loss ratio based on historical ratios of incurred claims to earned premium or on anticipated loss ratio from pricing or other analysis
    2. Multiplying the loss ratio times exposed earned premium for the projected months
    3. Subtraction of known paid claims

Tabular methods

- Tabular methods are commonly used to develop the present value of amounts not yet due by applying a continuance table deemed to be predictive of future claims liabilities.
- This approach is useful for claims such as disability or long term care for which a claims event triggers a sequence of payments.

Development methods

- The development method assumes the historical lag pattern can predict the payment pattern for claims that have been incurred but not yet completely paid.

Factor methods

- This method is generally used for reserves that are easily estimated due to a short lag or run off period.
- An example would include group life insurance, where reserves for incurred but not reported death claims are often established as a percentage of premium.

1. Continued

Average size claim method

- Under this method, the claim reserve for reported claims is estimated by reviewing claim sizes for previously closed claims.
- The total reported reserves is then calculated as the estimated average size multiplied by the number of reported claims, less any payments made on these claims prior to the valuation date.

(b) Calculate the dental IBNR as of August 31, 20X3. State any assumptions and show your work.

Commentary on Question:
Most candidates were able to set up a incurred/paid claims triangle, calculate completion factors, and produce an IBNR estimate. Many candidates received partial credit by using the age-to-age development method instead of the age-to-ultimate the question prescribed.

- The model solution for this part is in the Excel spreadsheet.

(c) Assess whether your colleague can take responsibility for your work, according to the section "1510 – Actuary's use of another person's work" of the Canadian Actuarial Standards of Practice (SoP). Justify your answer.

Commentary on Question:
Most candidates provided answers that focused on considerations such as reviewing the work for reasonability, disclosing your reliance, and assuming responsibility for the work, rather than the specific considerations of SoP 1510. These answers received little credit.

- Yes, your colleague can "take responsibility" for your work.
- The actuary may use and take responsibility for another person's work, given confidence that such actions are justified as a result of considerations such as the following:
    - Early and periodic communication with the other person.
    - Confidence in the other person's qualifications, competence, integrity, and objectivity.
    - The other person's awareness of how the actuary intends to use the other person's work.
    - Communication to the other person of any information known to the actuary that may affect the other person's work, and vice versa
    - Study of any report by the other person and discussion of it with the other person, especially of any reservation in the report.

1. Continued

(d) List the items that should be included in an external user report, according to the Section "1710 – Reporting: external user report" of the Canadian SoP.

Commentary on Question:
Most candidates did well on this question by listing many of the 18 items contained in Section 1710.

In an external user report, the actuary should:

- Identify the client or employer
- Describe the work, its purpose, and its users
- Say that use of the report may not be suitable for another purpose;
- Say whether or not the work is in accordance with accepted actuarial practice in Canada and, if not, disclose the deviation from that practice
- If useful, disclose any unusual application of accepted actuarial practice
- If the report is supported by the use of a model, disclose limitations in the model relevant to the intended purpose
- Disclose any aspect of the work for which the actuary does not take responsibility
- Describe each assumption used for the work that is material to the results of the work, including the extent of any margin for adverse deviations included with respect to each such assumption
- Provide the rationale for each such assumption that is material to the results of the work
- For matters requiring an assumption other than a model or data assumption, disclose any assumption that is different from assumption of continuance of the status quo and, if practical, useful, and appropriate under the terms of the engagement, disclose the effect of alternative assumptions
- Describe the methods used for the work
- In the case of a periodic report, disclose any inconsistency between the assumptions and methods of the current and prior reports and the rationale for such inconsistency
- Describe any subsequent event that is not taken into account in the work
- Disclose any reservation
- Express an opinion on the assumptions and methods used for the work
- Express an opinion on the results of the work
- Identify himself or herself and sign the report
- Date the report

2. Learning Objectives:

2. The candidate will understand how to prepare and interpret insurance company financial statements in accordance with IFRS.

Learning Outcomes:

(2a) Interpret insurer financial statements from the viewpoint of various stakeholders.

(2b) Evaluate key financial performance measures used by life and health insurers for both short and long-duration contracts.

(2e) Explain fair value accounting principles and describe International Financial Reporting Standards (IFRS).

(2f) Construct basic financial statements and associated actuarial entries for a life and health insurance company.

Sources:

CIA Educational Note - Financial Condition Testing, Jan 2023, pp. 1-45

IFRS 17 Insurance Contract Examples

Commentary on Question:

This question tests the candidates on all aspects of the solvency scenario testing under the Financial Condition Testing (CFT). Most candidates performed well for the calculation sections but did not demonstrate as strong an understanding of the solvency scenario testing in general.

Solution:

(a) Describe considerations involved in setting a solvency scenario under FCT.

Commentary on Question:

The question is asking candidates to describe the considerations involved in setting the solvency scenario, not the consideration related to the Financial Condition Testing (FCT). Most candidates were able to mention the scenario must test at 95th percentile (but recommended for a testing at 99th percentile), but were generally vague on other aspects of consideration. Candidates did not perform well in this part of the question.

- In a solvency scenario, an insurer would be expected to consider the occurrence of event(s) that test its ability to maintain a positive equity position.
- A solvency scenario is a plausible adverse scenario, with the percentile ranking of the scenario recommended to be at least at the 95th percentile over the scenario horizon.

2. Continued

- Although this guideline suggests this minimum, it is strongly recommended that analysis be performed at even higher percentile rankings and it would not be unreasonable to conduct scenario testing at the 99th percentile or beyond.
- If the actuary is unable to ascertain the percentile ranking of the scenario, the actuary would be comfortable that the scenario is of sufficient adversity to appropriately test the relationship of the insurer's statement value of assets to its liabilities.
- The threshold for solvency scenarios is a higher statement value of assets than liabilities.
- A solvency scenario could align with the level of shocks used in the ORSA.
- It is recommended that at least two solvency scenarios be tested.

(b) Construct the CSM amortization schedule. State any assumptions and show your work.

Commentary on Question:
Candidates generally demonstrated good understanding on how to set up the amortization schedule, despite missing some parts of the calculation.

- The model solution for this part is in the Excel spreadsheet.

(c) Construct the CSM amortization schedule for each scenario. State any assumptions and show your work.

Commentary on Question:
Most candidates did not perform well in this part of the question. The timing of when to reflect the shocks in the CSM amortization schedule appears to be challenging to most candidates.

- The model solution for this part is in the Excel spreadsheet.

(d) Critique whether each scenario qualifies as a solvency scenario. Justify your answer.

Commentary on Question:
A critique is analysis that covers both strengths and weaknesses. It may also include listing alternatives. Most candidates did not perform well in this part of the question as they did not first consider whether each scenario qualified as a solvency scenario.

2. Continued

- The 10% increase in claims is not very strenuous. It would likely not meet the 95% percentile guideline suggested in the FCT reporting guideline.
- The active lapse shock is not an adverse scenario at all, at least for this particular block, let alone for solvency testing. In this case, lapses help improve the performance of the block and CSM goes up. I would suggest another scenario be used for solvency testing as this one doesn't put any strain on the health of the portfolio.

3. Learning Objectives:

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

5. The candidate will understand how to describe the flow of funds in the health care system and the role of providers in the system.

Learning Outcomes:

(3b) Describe the major applicable laws and regulations and evaluate their impact.

(5a) Establish a framework of how funds flow through the health care system.

(5b) Describe the role physicians play and their influence on the flow of funds.

(5c) Describe the market power of hospitals and how provider systems compete for patients, physicians, and contracts.

Sources:

GH201-671-25: CHLIA Guideline G4 – Coordination of Benefits

GH201-714-25: How Employers are Integrating DEI into their Benefits Plans

GH201-713-25: How Will the Potential Work-from-Anywhere Boom Post-Pandemic Impact Benefit Plans?

GH201-102-25: Flow of Funds in Healthcare System and the Role of Providers

GH201-103-25: Health Economics and Financing, Getzen, Thomas and Kobernick, Michael, 6th Edition, 2022: Sections 5.4-5.6, 6.2-6.3, 7.4-7.5, 8.4-8.5, 13.2-13.3

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a) Identify whether each of the following statements is true or false. Justify your answer.

- Economic problems of medical care can be explained as uncertainties in disease incidence and treatment outcome leading a patient to seek transfer of their financial risk and agency.
- Regardless of the severity of a medical condition, consumers can shop around for the best price.
- Medical costs tend to be elastic.
- A US major medical plan covers substantially more services than a Canadian Medicare plan.

3. Continued

- The increase in supply of physicians is not instantaneous.
- Most hospitals compete over patients rather than physicians.

Commentary on Question:
Most candidates were able to correctly identify whether each statement is true or false, with supporting justification.

Economic problems of medical care can be explained as uncertainties in disease incidence and treatment outcome leading a patient to seek transfer of their financial risk and agency.

- This is true. The number and severity of medical treatments is random to a person. The average person lacks medical knowledge and relies on agency of the physician to make medical choices.

Regardless of the severity of a medical condition, consumers can shop around for the best price.

- This is false. The pain price dictates the ability for a member to shop around. For low severity cases the member has the ability to shop around. In a heart attack, the member lacks the ability to shop around.

Medical cost tend to be elastic.

- This is false. Medical costs tend to be inelastic. The vast majority of costs are paid by insurance. So a person's tendency to get medical is unaffected by price. Physicians also tend to look at medical need and ignore price

A US major medical plan covers substantially more services than a Canadian Medicare plan.

- This is true. US plans cover smaller ancillary services than Canadian Medicare plans do not cover like Psychologists, Optometrists, and DME. In Canada, a supplemental health plan is needed to cover these extra benefits.

The increase in supply of physicians is not instantaneous.

- This is true. Even if you increase the number of students in medical schools, it takes time for them to complete medical school and residency. You also have to contend with retiring physicians.

Most hospitals compete over patients rather than physicians.

- This is false. Doctors expertise and the control over who gets admitted makes doctors more competitive than a set of patients. The more a physician specializes, the more a hospital can charge for services.

3. Continued

(b) Calculate the amounts reimbursed by each plan in 2026. State any assumptions and show your work.

Commentary on Question:
Candidates generally demonstrated an understanding of the need to identify first payor vs. second payor. However, some candidates were challenged by the claims reimbursement calculation for the second payor.

- The model solution for this part is in the Excel spreadsheet.

(c) Describe the responsibilities of the following regarding coordination of benefits, according to the Canadian Life and Health Insurance Association (CLHIA) guideline:

(i) Covered individual

(ii) Group plans

Commentary on Question:
Candidates did not perform well on this part of the question. Candidates generally did not demonstrate an understanding of the claims adjudication process (from the point of sales, to initial submission to first payor, then subsequent submission to the second payor) and were not able to articulate the responsibilities of the individual (claimant) and the group plans (first payor and second payor) with respect to the process of paying a coordinated claim.

- It is the Covered Individual's responsibility to retain a copy of the original claim form and receipts to apply for the COB provision, if claims are submitted by paper.
    - For electronic claim submissions, it is the responsibility of the Covered Individual to identify to the provider all available Group Plan coverage for the purpose of COB.
- The first Group Plan to determine benefits will provide the Covered Individual with a complete Explanation of Benefits (EOB) with service details, charges and amounts paid. The EOB may be provided in paper format or electronically.

3. Continued

- Electronic Claims Submission to the Second Group Plan - If the first payment was made electronically and if the second Group Plan to determine benefits has the ability to process coordination of benefits on an electronic basis, the second Group Plan will require electronic submission of complete details of the claim submitted to the Group Plan that determines benefits first including service details, charges and amounts paid. In all other situations, the second Group Plan to determine benefits will require a paper EOB.
    - Paper Claims Submission to the Second Plan - The Group Plan to determine benefits second will require a completed claim form and a copy of the EOB produced by the Group Plan that determines benefits first, along with copies of any applicable receipts. Photocopies are acceptable to the Group Plan that determines benefits second.

(d) Propose recommendations to help accomplish ABC's goal. Justify your answer.

Commentary on Question:
This is a high-level question where any reasonable answer may be accepted. Candidates must provide four or more items in order to obtain full marks. Most candidates performed well on this question.

- Address family building
    - Fertility
    - Surrogacy
    - Adoption coverage
- Diversity in the drug plan
    - Fertility
    - Obesity
    - Erectile dysfunction
    - Smoking cessation
- Using more inclusive language in plan documents
- Providing a wellness account to allow for more diverse spending
- Any other valid answers (such as women's health, indigenous services, etc.)

(e) Identify potential issues for ABC if remote work abroad is allowed.

Commentary on Question:
Candidates performed well in this part of the question by pointing out inter-provincial and/or international issues related to working remotely.

3. Continued

- Impact of legislation differences between provinces such as:
  - Taxation rules
  - Provincial health care differences
- Premium and sales tax implications
- Considerations if an employee works abroad
  - Competitiveness of benefits relative to the country the employee is working from
  - Benefits coverage availability while abroad

4. Learning Objectives:

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

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

Learning Outcomes:

(3b) Describe the major applicable laws and regulations and evaluate their impact.

(3c) Understand the impact of the taxation of both insurance companies and the products they provide.

(4a) Describe eligibility requirements for social programs in Canada and the benefits provided.

(4b) Describe how private group insurance plans work within the framework of social programs in Canada.

Sources:

GH201-653-25: Telus Health Note: How Much Does that Drug Cost?

GH201-644-25: TACCESS: An Advisor's Guide to Understanding How Taxes Impact Group Insurance Benefits in Canada

GH201-694-25: Guide to Canada Benefits Legislation, 2018, sections 7.1, 7.2, 7.2.1, 7.2.5 & 7.2.6

Commentary on Question:

The question was meant to test candidates on drugs, generic substitution and government programs for employees aged 65 and over.

Solution:

(a) Describe how prices are set for both brand name and generic drugs in Canada.

Commentary on Question:

This part was a retrieval question and was well answered by candidates.

- Brand
  - Prices for brand drugs are set by the manufacturer but are regulated by the Patented Medicines Prices Review Board (PMPRB).
  - The role of the PMPRB is to ensure that drug prices are not excessive.
  - Prices are determined based on the median of seven OECD comparator countries.

4. Continued

- Generic
  - The PMPRB does not regulate generic prices.
  - For the most part, generic prices are set as a percentage of the equivalent brand price, by provincial governments.
  - As a result, generic prices can vary across provinces.

(b) Calculate XYZ's current year costs. State any assumptions and show your work.

Commentary on Question:
This question was generally answered very well. However, some candidates forgot to apply Ontario sales tax and the target loss ratio.

- The model solution for this part is in the Excel spreadsheet.

(c) Calculate XYZ's projected costs next year if:

(i) A physician prescribes the generic drug.

(ii) A physician prescribes the brand name drug and indicates "no substitution."

State any assumptions and show your work.

Commentary on Question:
This part was the hardest part of the question. It required candidates to think about all insureds being one year older, pushing three insureds at age 65. The cost of plan in (i) should include an integration with the Ontario governmental program. Some candidates forgot to age all insureds, while others completely excluded insureds aged 65 from the cost of the plan. Part (ii) was better answered, mainly due to the insureds aged 65 being fully reimbursed by the plan.

- The model solution for this part is in the Excel spreadsheet.

(d) Recommend two changes to the plan design to reduce XYZ's plan costs. Justify your answer.

Commentary on Question:
Candidates were able to make meaningful recommendations and performed very well on this part of the question.

4. Continued

- Require mandatory generic substitution to minimize costs.
- Reduce coinsurance to encourage employees to become better consumers.
- Review refill guidelines – e.g. maintenance drugs can be a standard 90-day refill – to keep dispensing fees as low as possible. As the drug in question is a maintenance drug, 90 days is reasonable.

5. Learning Objectives:

2. The candidate will understand how to prepare and interpret insurance company financial statements in accordance with IFRS.

Learning Outcomes:

(2c) Project financial outcomes and recommend a strategy to senior management to achieve financial goals.

(2f) Construct basic financial statements and associated actuarial entries for a life and health insurance company.

Sources:

GH201-693-25: OSFI Guidelines for Life Insurance Capital Adequacy Test (LICAT), Ch. 6: Insurance Risk: (sections 6.1-6.8, excluding 6.7) (pp. 130-149)

Commentary on Question:

Commentary listed underneath question component.

Solution:

(a) List and describe the insurance risk components involved in the calculation of the required capital.

Commentary on Question:

Several candidates misunderstood the question and provided a different list of "risks". For candidates who identified the correct list, they generally performed well.

Mortality risk:

- Mortality risk is the risk associated with the variability in liability cash flows due to the incidence of death.
- Level, trend, volatility and catastrophe risk components are calculated for all individual and group life insurance products that are exposed to mortality risk.

Longevity risk:

- Longevity risk is the risk associated with the increase in liability cash flows due to increases in life expectancy caused by changes in the level and trend of mortality rates.

5. Continued

Morbidity risk:

- Morbidity risk is the risk associated with the variability in liability cash flows arising from the incidence of policyholder disability or health claims (including critical illness), and from termination rates.
- Morbidity risk required capital components are calculated for level, trend, volatility and catastrophe risks. Total required capital for morbidity risk is calculated separately by geographic region using the following formula:

$$RC_{morbidity} = \sqrt{RC_{vol}^2 + RC_{cat}^2} + RC_{level} + RC_{trend}$$

Lapse risk:

- Lapse risk is the risk associated with the variability in liability cash flows due to the incidence of policyholder lapses and other policyholder behaviour.
- Lapse risk includes risk arising from options that allow policyholders to fully or partially terminate an insurance contract, or to decrease or suspend/resume insurance coverage (e.g. the option to reduce premiums in universal life contracts).
- Lapse risk required capital is calculated separately for each geographic region using the following formula:

$$RC_{lapse} = \sqrt{RC_{vol}^2 + RC_{cat}^2} + RC_{level+trend}$$

Expense risk:

- Expense risk is the risk associated with the unfavourable variability of expenses incurred in servicing insurance or reinsurance contracts (e.g., the variability in expense liability cash flows due to the variation of the in force policies, excess claims, lapses and surrenders, new business decrease and other circumstances that could have an impact on unit expenses).
- Expense risk required capital is calculated in aggregate for level, trend, volatility and catastrophe risks for each geographic region.

(b) Calculate the required capital for the following insurance risk components:

(i) Mortality risk

(ii) Lapse risk

State any assumptions and show your work.

5. Continued

Commentary on Question:
Candidates performed well in this part of the question, despite missing some small parts of the calculation and some calculation errors.

- The model solution for this part is in the Excel spreadsheet.

(c) Propose a strategy that XYZ could implement to achieve this objective. Justify your answer.

Commentary on Question:
Propose means to make a decision regarding what to do about a situation. Note that there may be more than one reasonable choice and your grade will depend on the support you provide for your choice. Candidates only have to propose one strategy (but need to include supporting justification) to obtain the full mark.

- Reinsurance: Suggest utilizing reinsurance to transfer various risks, not limited to mortality, to a reinsurer.
- Asset Allocation: Recommend adjusting the investment portfolio to include lower-risk assets, to improve market risk requirements
- Product Design and Pricing: redesigning products to include features that are less capital-intensive or adjusting pricing to better reflect risk, reducing cashflow volatility
- Operational Efficiency to reduce expense risks.

6. Learning Objectives:

1. The candidate will understand how to apply valuation principles for group and health insurance contracts.

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

Learning Outcomes:

(1f) Describe, calculate, and evaluate non-IBNR types of reserves and explain when each is required.

(4a) Describe eligibility requirements for social programs in Canada and the benefits provided.

(4b) Describe how private group insurance plans work within the framework of social programs in Canada.

Sources:

GH201-100-25: Health Reserves

Morneau Shepell Handbook of Canadian Pension Benefit Plans, 17th Edition, 2020 , Ch. 2: Government Pension Programs (pp. 44-64, Canada & Quebec Pension Plans)

Commentary on Question:

This question primarily assesses candidates' knowledge of tabular-reserves methods in the context of long-term disability (LTD) products, their understanding of CPP/QPP disability benefits, and how these components are applied to calculate the Disabled Life Reserve (DLR).

Solution:

(a) List and describe the assumptions for tabular methods.

Commentary on Question:

Most candidates were able to list and describe some tabular-method assumptions, but many were challenged by the remaining points in the context of the Disabled Life Reserve (DLR) for LTD products.

Termination Rates:

Claims termination rates are adjusted in response to a number of situations:

- Mental and Nervous conditions have shown significant variation in response to benefit plans and changing treatment patterns.

6. Continued

- Results for certain conditions produce significant variability in termination patterns.
    - Some carriers use a variety of diagnosis-specific termination rates to avoid reserve adequacy issues induced by variations in the mix of claims compared to standard table experience. The main caveat to the actuary is to remember to adjust factors for the residual block to pull out experience related to the specific causes.
- Provisions related to the definition of disability can create differences in termination rates because of the use of an "own occupation" clause that usually result in longer periods of disability. Because of the mix of disability definition within a block, it has not always been possible to create credible experience studies. Carriers often approximate the result of new termination tables by adjusting the base claims reserves using a multiple of the reserve instead of trying to change the table factors.

Disability Benefit Amounts:

- Disability reserves might also need adjustment to recognize possible reductions in payments due to integration with governmental benefits. Depending on the contract, offsets may be created by social insurance, short term disability plans, or other income sources. In the case of many regulatory reserve requirements, offset impact is not specifically considered.

The offset result to the reserve must consider 1) the likely level of benefit, 2) the probability of receiving the other benefit, and 3) the likely duration of such payments. Reserves failing to recognize such offsets will be too conservative. On the other hand, the actuary must recognize that many governmental benefits are subject to political influence and are therefore not guaranteed to follow historical patterns.

- Similarly, some regulatory reserve standards do not specifically address the impact of **inflation on benefits**. Many plans have **Cost of Living Adjustment (COLA)** benefits that react to economic inflation. Most COLA-related valuations require the actuary to pick an inflation assumption. Reserve assumptions may be long-term estimates of inflation or may use an inflation assumption based on the difference between the discount rate and a real interest rate.

(b) Describe how to incorporate conservatism when using tabular methods.

Commentary on Question:
This question was generally well answered.

6. Continued

- Tabular reserves tend to involve margins applied in the assumptions made to calculate the tabular factors. Projection methods tend to introduce margins in terms of the trends.
- In the case of statutory tables, an explicit margin is typically added to assumptions in the development of a valuation table. No additional margin is typically needed.
- However, the carrier will need to undertake experience studies to assure that the presumed margin in such tables actually exists relative to the emerging experience for the block of business being reserved.

(c) Describe criteria for receiving CPP/QPP disability benefits.

Commentary on Question:
Most candidates did well when anchored to the prescribed sources, but some omitted or misstated one or more criteria, which affected full credit.

- These pensions are payable to a contributor who has a severe and permanent disability, and the contributor is unable to engage in any substantially gainful occupation with earnings in excess of $5,800 per year in 2020.
- In order to be eligible for CPP disability, he or she must have contributed to the CPP in four of the last six years on earnings that are at least 10% of the YMPE to be entitled to these disability pensions under the CPP.
- Bill-36 reduced the CPP contribution requirement to three of the last six years, but only if a contributor has contributed for at least 25 years.
- Under the QPP, an individual who is less than age 60 must have contributed during
    - At least two of the last three years in his or her contributory period; or
    - at least five of the last 10 years in his or her contributory period; or
    - at least half of the years in his or her contributory period, with a minimum of two years.

(d) List the CPP/QPP enhancements that were announced in 2016 by the federal and provincial finance ministers.

Commentary on Question:
Most candidates demonstrated a strong understanding of the study material and were able to list each key enhancement.

6. Continued

- The CPP/QPP replacement percentage on pensionable earnings will increase from 25% to 33.33% by the year 2023.
- To fund the benefit increase, the contribution rate on pensionable earnings up to the YMPE will be increasing up to 11.9% for CPP and 12.8% for QPP.
- In 2024 and 2025, a new upper limit on pensionable earnings will be introduced called the Year's Additional Maximum Pensionable Earnings (YAMPE). The YAMPE will be 7% higher than the YMPE in the year 2024 and will be 14% higher than the YMPE in the year 2025 and thereafter.
- The contribution rate on pensionable earnings above the YMPE and below the YAMPE will be 8.0% for both CPP and QPP respectively (i.e. 4% of earnings for both employers and employees).

(e) Calculate the estimated CPP monthly benefit for this claimant. State any assumptions and show your work.

Commentary on Question:
Performance varied among candidates. Some demonstrated a strong understanding of the source material and were able to calculate the CPP amount, while others showed a poorer grasp.

- The model solution for this part is in the Excel spreadsheet.

(f) Calculate the DLR as of December 31, 2025:

(i) With the estimated CPP offset

(ii) Without the estimated CPP offset

State any assumptions and show your work.

Commentary on Question:
Performance varied among candidates. Some demonstrated a strong understanding of the source material and were able to populate the tabular methods correctly, while others showed a poorer grasp and made errors in calculating the present value of benefits.

- The model solution for this part is in the Excel spreadsheet.