

# GH FVCC Model Solutions

## Fall 2021

### 1. Learning Objectives:

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

### Learning Outcomes:

- (3a) Describe eligibility requirements for social programs in Canada and the benefits provided.

### Sources:

Morneau Shepell Handbook of Canadian Pension Benefit Plans, 17th Edition, 2020, Ch. 18: Workers' Compensation

### Commentary on Question:

*Most candidates did very well on parts b and c, but missed several key points in parts a, d and e.*

### Solution:

- (a) Describe employee groups who are covered for workers compensation benefits in Canada.

### Commentary on Question:

*The intent of the question was for candidates to recall who is required to have workers compensation coverage. In general, this question was not well answered by most candidates.*

- Workers' Compensation coverage is generally mandatory for all employees in industrial occupations.
- In some provinces, domestic employees, casual employees, employees in certain service industries, and employees in the "knowledge" industries, such as finance and insurance, are exempt from mandatory coverage.
- Employee groups exempt from mandatory coverage may still be covered for Workers' Compensation on application by the employer.
- Sole proprietors and executive officers are not subject to mandatory coverage, but may elect to be covered as employees.

## 1. Continued

- (b) Describe how workers compensation benefits are funded in Canada.

**Commentary on Question:**

*The intent of the question was for candidates to recall how these benefits are funded in Canada. In general, this question was well answered by most candidates.*

- The Workers' Compensation system is funded solely by assessments paid by covered employers.
  - The assessment rate is applied to the annual payroll of the covered employees, up to an assessable earnings maximum.
- Contributions from employees are not permitted.
- Assessments are based on either individual liability or collective liability.
  - The vast majority of industries in Canada are assessed on the basis of collective liability.
    - Employers are divided into industry classes and/or rate groups according to similar business activity and inherent accident and hazard risks.
  - Individual liability is the assessment basis frequently used for government or public agencies, Crown corporations, and large public transportation organizations.
    - Each employer is self-insured, or individually liable for accident and sickness costs as they occur.

- (c) List and describe the benefits provided by workers compensation coverage in Canada.

**Commentary on Question:**

*The intent of the question was to test candidates' knowledge of the benefits covered by workers compensation. In general, this question was well answered by most candidates.*

- **Health Care**
  - All medical expenses incurred as a result of a workplace accident or disease are paid by the Workers' Compensation system.
  - Covered medical expenses include hospital charges and physician and surgeon fees normally covered by the provincial health care schemes, as well as the cost of drugs and ancillary services usually covered by private medical insurance plans.

## 1. Continued

- **Short-Term Disability (STD)**
    - Income replacement benefits are payable to the disabled employee until the employee has recovered and is capable of returning to the pre-accident occupation or, having gone through a rehabilitation program, is estimated capable of earning at the same level as prior to the accident.
  - **Long-Term Disability (LTD)**
    - Income replacement benefits are payable to the disabled employee under Workers' Compensation and are adjusted for cost-of-living increases.
    - In addition, most jurisdictions provide for some form of pension for injured workers after age 65.
  - **Rehabilitation**
    - To facilitate a return to work, the injured employee may participate in a medical or vocational rehabilitation program.
    - Examples of some services provided include counseling, job search assistance, ergonomic modifications, tuition, homemaker assistance, and on-the-job training.
  - **Survivor**
    - The benefits for the spouse range from a relatively short-term pension with a larger lump-sum payment to benefits payable to age 65 or for life with or without a smaller lump-sum payment.
    - The amounts paid to the surviving spouse may be dependent upon the spouse's age, the number and ages of the dependent children, and whether or not the spouse is disabled.
- (d) Calculate the present value of workers compensation benefits for each of the listed employees above. State any assumptions and show your work.

### **Commentary on Question:**

*The intent of the question was to test candidates' knowledge of how to calculate benefit costs. Most candidates failed to realize that Jennifer's injury was not work related and so worker's compensation would not pay out any benefits. Also, for Theodore's calculation, successful candidates applied COLA annually and trend monthly.*

# 1. Continued

## Alvin

- Health costs = months off x monthly health cost x discounting  
=  $100 / (1+3\%)^{(1/12)} = 99.75$
- STD costs = months off x monthly income x discounting x replacement ratio =  $6,000 \times 85\% / (1+3\%)^{(1/12)} = 5,087.45$
- Rehabilitation costs = months off x rehab cost x discounting  
=  $150 / (1+3\%)^{(1/12)} = 149.63$
- Total Alvin Cost = 5,336.84

## Jennifer

- Health issue is not related to a work accident and so worker's compensation pays nothing. \$0

## Theodore

- *Note: Costs are most easily calculated when spreadsheet is set up such that monthly cost for each benefit are calculated on a separate line and then discounted back to present value. Note that the question states that COLA is applied at end of year and all costs are paid at month end.*
- Health costs = PV(health cost at month 1) + PV(health cost at month 2)+ ... =  $500 \times (1+5\%)^0 / (1+3\%)^{1/12} + 500 \times (1+5\%)^{1/12} / (1+3\%)^{2/12} + \dots = 31,387.08$
- STD & LTD costs = months off x monthly income x discounting x COLA x replacement ratio = PV(income at month 1) + PV(income at month 2)+ ... =  $7,500 \times 85\% \times (1+4\%)^0 / (1+3\%)^{1/12} + 7,500 \times 85\% \times (1+4\%)^0 / (1+3\%)^{2/12} + \dots = 369,199.30$
- Pension costs = no pension payment is assumed
- Rehabilitation costs = 0 since the worker will never return to work.
- Total Theodore Cost = 400,586.39

- (e) Propose incentives to encourage Blades of Steel to better manage the cost of workplace accidents. Justify your answer.

### Commentary on Question:

*The intent of the question is to test candidates' critical thinking of cost management strategies. In general, this question was not well answered by most candidates.*

## 1. Continued

- Participate in accident prevention program
- Early return to work initiatives
- Experience rating methods:
  - Prospective – the average industry assessment rate is adjusted for an employer by applying discounts or surcharges to the rate for the current year, based on the experience of the employer in past years.
  - Retrospective – assessments are adjusted after the year has passed, by providing refunds or surcharges based on the actual experience of the employer for the year (or years).

## 2. Learning Objectives:

4. The candidate will understand how to prepare and be able to interpret insurance company financial statements in accordance with IFRS & IAS.
5. The candidate will understand how to evaluate the impact of regulation and taxation on insurance companies and plan sponsors in Canada.

### Learning Outcomes:

- (4f) Describe how to compute the taxable income of a life and health insurance company.
- (5c) Understand the impact of the taxation of both insurance companies and the products they provide.

### Sources:

Canadian Insurance Taxation, Swales, et. al., 4th Edition, 2015

- Ch 2: Taxation of Life Insurers – An Introduction
- Ch. 4: Income for Tax Purposes – General Rules (pp. 37-38 [excluding “Imputed Interest Benefit on Real Property”] & 43-47)
- Ch. 9: Investment Income Tax (pp. 135-142)

### Commentary on Question:

*Most candidates performed well on part b of the question, while parts a and c needed more work.*

### Solution:

- (a) List and describe the inclusions in net income that are permitted under the special tax provisions applicable to life insurers.

#### Commentary on Question:

*The intent of the question was for candidates to recall the inclusions in net income that are permitted under the special tax provisions for life insurers. In general, this question was not well answered by most candidates. Successful candidates were able to list and describe the inclusions in net income permitted under the special tax provisions.*

- **Premium Income**

- Insurers must include in income from a life insurance business the amount of net premiums written on the sale of life insurance policies and amounts received in respect of annuities.
  - Net premiums written include direct written premiums and premiums assumed under reinsurance arrangements, less premiums ceded under reinsurance arrangements.

## 2. Continued

- **Policy Loans**
  - A life insurer must include in income any amount received as a repayment of a policy loan or as interest on a policy loan.
- **Reserves**
  - If tax reserves are negative, that amount must be included in income for the year.
  - Any reserves deducted in the previous year must also be included in the current year's income.
- **Investment Income**
  - Life insurers are subject to a 15% tax on the income that accrues annually within certain life insurance policies.

- (b) Describe the deductions from income that are permitted under the special tax provisions applicable to life insurers.

### **Commentary on Question:**

*The intent of the question was for candidates to recall the deductions from income that are permitted under the special tax provisions for life insurers. In general, this question was well answered by most candidates. Successful candidates were able to list and describe the deductions from income permitted under the special tax provisions.*

- **Payments to Policyholders**
  - Life insurer is allowed to deduct policy loans, claims paid on a paid basis, reserve for unpaid claims (including IBNR), payments on surrender, premium and experience rating refunds, and dividends on participating policies.
- **Policyholder Dividends**
  - A deduction is permitted for policyholder dividends payable and paid, to the extent that the amount was not deducted in a previous year.
- **Experience Rating Refunds**
  - Insurers are permitted a deduction for experience rating refunds that during the year or 12 months thereafter were:
    - Paid or unconditional credited to a policyholder
    - Applied against a liability to pay premiums.
- **Interest Expense**
  - Borrowed money used to acquire property or amounts payable in respect of property.
  - Deposits held in connection with life insurance policies in Canada or policies insuring Canadian risks.

## 2. Continued

- **Interest Paid to Non-residents**
    - Special rules limit the deductibility of interest on debt a Canadian corporation owes to specified non-resident shareholders.
    - In general terms, the limitation will occur to the extent that the average outstanding debt, calculated on a monthly basis, owing to those shareholders exceeds 1.5 times the equity amount of the corporation.
  - **Receivables and Bad Debts**
    - Insurers may not claim a reserve for doubtful debts in respect of premiums receivable for a life insurance policy in Canada.
    - This restriction does not apply to premiums receivable for non-life insurance policies.
  - **Policy Acquisition Expenses**
    - Any outlay or expense made or incurred on account of the acquisition of an insurance policy, must be amortized and deducted over the period of coverage of the policy.
    - If the policy is non-cancellable or guaranteed renewable accident and sickness insurance policies, and life insurance policies other than group life insurance policies providing coverage for 12 months or less, acquisition costs are currently deductible.
  - **Prepaid expenses**
    - Rules prohibit a deduction for prepaid expenses in general before the year which they relate.
  - **Rental Loss**
    - Life insurers may generate a rental loss on real property by claiming capital cost allowance.
    - Any rental loss created in this fashion may be used to offset insurer's income from other sources.
  - **Foreign Taxes Paid on Income from a Foreign Insurance Business**
    - Life insurers cannot claim foreign tax credits for both business and non-business taxes.
  - **Investment Income Tax**
    - Life insurers may deduct the investment income tax payable for the year.
  - **Reserves**
    - A life insurer is permitted to deduct prescribed reserves.
- (c) Calculate the investment income tax on these three blocks of policies as of December 31, 2020. State any assumptions and show your work.



## 2. Continued

### **Commentary on Question:**

*Successful candidates were able to use the information from above to calculate the components of the Investment Income Tax correctly. Marks were given for successfully calculating Life Investment Income, Experience Rating Refund, Canadian life investment losses carried forward if applicable, and the final investment income tax.*

- The model solution has been broken down into 3 distinct steps: Life investment income, experience rating refund, and Canadian life investment losses carried forward which must be applied to all three lines of business (UL Policy, Group Life Policy, and 10-year Term). Once all 3 steps are calculated the Tax of the three lines of business are summed:
- **Step 1: Calculation of the Life Investment Income**

#### **Average Life Reserves**

$$= (\text{Total Life Reserves (Dec 31, 2019)} + \text{Total Life Reserves (Dec 31, 2020)}) / 2$$

#### **Yield**

$$= 55\% * \text{Average interest rate on Government of Canada bonds base on policy issue dates}$$

#### **Life Investment Income**

$$= \text{Average Life Reserves} \times \text{Yield}$$

	<b>UL Policy</b>	<b>Group Life Policy</b>	<b>10-year Term</b>
Average Life reserves	\$ 5,993,535	\$ 125,000	\$ 2,312,500
Yield	2.0625%	2.0625%	2.0625%
Life Investment Income	\$ 123,617	\$ 2,578	\$ 47,695

## 2. Continued

- **Step 2: Calculating the Experience Rating Refund (Only the group life policy included an experience refund reserve)**

### Average Experience Rating refund reserve

$$= \text{Experience refund reserve} / 2$$

### Yield adjusted average claim fluctuation reserve

$$= \text{Yield} \times \text{Average experience rating refund reserve}$$

### Experience rating refund reserve adjustment

$$= \text{Yield adjusted average claim fluctuation reserve prorated for the number of days in the taxation year.}$$

**In this case, the prorated time is the number of days from July 1, 2020 through December 31, 2020**

	<b>UL Policy</b>	<b>Group Life Policy</b>	<b>10-year Term</b>
Average experience rating refund reserve	\$ 0	\$ 6,250	\$ 0
Yield	3.75%	3.75%	3.75%
Yield adjusted average claim fluctuations reserve	\$ 0	\$ 234	\$ 0
Reduction for changes in the experience rating refund since 1990	\$ 0	\$ 0	\$ 0
Experience rating refund reserve adjustment	\$ 0	\$ 118	\$ 0

- **Step 3: Calculating the investment losses and tax**

**Life Investment Income:** Calculated in Step 1

**Experience rating refund reserve adjustment:** Calculated in Step 2

## 2. Continued

### **Amounts reported to policyholders as includable in income for the policyholder**

= Policy holder loans + Policy holder withdrawals

### **Canadian life investment income or loss for the year**

= Life investment income + experience rating refund reserve adjustment – Amounts reported to policyholders as includable in income for the policyholder

### **Canadian life investment loss carry-forward**

= Investment losses carried forward

### **Taxable Canadian life investment income**

= Canadian life investment income or loss for the year – Canadian life investment loss carry-forward

## 2. Continued

### Investment Income Tax

= Taxable Canadian life investment income x tax rate

	<b>UL Policy</b>	<b>Group Life Policy</b>	<b>10-year Term</b>	<b>Total</b>
Life Investment Income	\$ 123,617	\$ 2,578	\$47,695	\$171,312
Experience rating refund reserve adjustment	\$ 0	\$ 118	\$ 0	\$ 0
Amounts reported to policyholders as includable in income for the policyholder	\$ 62,500	\$ 0	\$ 0	\$ 62,500
Canadian life investment income or loss for the year	\$ 61,117	\$ 2,696	\$47,695	\$108,812
Canadian life investment loss carry-forward	\$ 56,000	\$ 0	\$ 0	\$ 56,000
Taxable Canadian life investment income	\$ 5,117	\$ 2,696	\$ 47,695	\$ 52,812
Tax Rate	15%	15%	15%	15%
Investment Income Tax	\$ 767	\$ 404	\$ 7,154	\$ 7,922

### Total Investment Tax

= Sum of the Investment Income Tax of UL Policy, Group Life Policy, and 10-year term

### 3. Learning Objectives:

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

#### Learning Outcomes:

- (4b) Evaluate key financial performance measures used by life and health insurers for both short and long-term products.
- (4c) Project financial outcomes and recommend strategy to senior management to achieve financial goals.

#### Sources:

GHFV-693-19: OFSI Guidelines for Life Insurance Capital Adequacy Test (LICAT)

#### Commentary on Question:

*This was a rather lengthy question on Canadian Life Insurance Capital Adequacy Testing (LICAT), requiring significant recall of items from the study note, as well as calculations. Candidates generally did not score well on this question.*

#### Solution:

- (a) Explain how the required capital component for morbidity risk is calculated for the following group insurance products:
  - (i) Short Term Disability
  - (ii) Long Term Disability
  - (iii) Health and Dental

#### Commentary on Question:

*Required capital components for morbidity risk for each of the group insurance products was taken from chapter 6 of the study note. Candidates were required to identify/describe the 4 risks for determining the capital components while also being able to explain how the required capital components for the morbidity risk is calculated for each product. Candidates were not penalized for providing the incorrect % changes for incidence and termination and received points for stating correctly on which best estimate assumptions (BEA) the shocks were applied depending on risk component and insurance product. Most candidates scored well on this part compared to other components of the question.*

The value of each morbidity risk component is the difference between the present value of the shocked cash flows and the present value of the best estimate cash flows.

### 3. Continued

Risk components are calculated at the policy level, summed by product and added across products by risk component. Total required capital for morbidity risk is calculated separately by geographic region using the following formula:

$$\text{RC\_morbidity} = \text{Sqrt}(\text{RC\_volatility}^2 + \text{RC\_catastrophic}^2) + \text{RC\_level} + \text{RC\_trend}$$

- (i) Short Term Disability:
  - Active live reserves:
    - Level risk - If rates guaranteed > 12 months, +25% on incidence rates
    - Trend risk – If rates guaranteed >= 24 months, 100% decrease in the BEA for morbidity improvement
    - Volatility risk – +25% on first-year incidence rates
    - Catastrophic risk – +25% on first year incidence rates
  - IBNR:
    - Level risk – -25% on termination rates
    - Trend risk – 100% decrease in the BEA for morbidity improvement
  
- (ii) Long Term Disability:
  - Active lives:
    - Level risk – If rates guaranteed > 12 months, +25% on incidence rates
    - Trend risk – If rates guaranteed >= 24 months, 100% decrease in the BEA for morbidity improvement
    - Volatility risk – +25% on first-year incidence rates
    - Catastrophic risk – +25% on first year incidence rates
  - IBNR / Disabled live reserves:
    - Level risk – -25% on termination rates
    - Trend risk – 100% decrease in the BEA for morbidity improvement
  
- (iii) Health & Dental:
  - Level risk - If rates guaranteed > 12 months, +20% on incidence rates
  - Trend risk – If rates guaranteed >= 24 months, 100% decrease in the BEA for morbidity improvement
  - Volatility risk - +15% medical / +20% dental on first-year incidence rates

### 3. Continued

- (b) Describe the two adjustments to the insurance risk required capital formula to account for special policyholder arrangements.

**Commentary on Question:**

*In general, candidates did not score well on this question. Candidates that did not score well failed to identify the two adjustments to the insurance risk required capital formula to account for special policyholder arrangements. A few candidates were able to describe specific policyholder arrangements and as such received partial credit for doing so.*

**Adjustments to group business:**

- Required capital may be reduced if a group benefit included in the calculation of the insurance risk requirement carries one of the following risk-reduction features that provides for a full transfer of risk: 1) “guaranteed no risk”, 2) deficit repayment by policyholders, or 3) a “hold harmless” agreement where the policyholder has a legally enforceable debt to the insurer.
- The amount by which required capital may be reduced is equal to a scaling factor multiplied by the sum of the marginal policy requirements for the policy calculated net of all reinsurance.
- The scaling factor to be used is 95% if the group policyholder is the Canadian Government or a provincial or territorial government in Canada, and 85% for all other policyholders.

**Policyholder deposits:**

- Qualifying policyholder deposits, excluding actuarial and claim reserves and any due refund provisions, may be used to reduce the insurance risk requirement for a policy.
- Such deposits must be: 1) made by policyholders, 2) available for claims payment (e.g., claims fluctuation and premium stabilization reserves, and accrued provision for experience refunds), and 3) returnable, net of applications, to policyholders on policy termination.
- When an insurer can recover excess losses from a deposit for a particular policy on a first dollar, 100% coinsurance basis, the amount by which required capital may be reduced is the lower of the deposit amount, or the sum of the marginal policy requirements for each of the insurance risks mitigated by the deposit, calculated net of all reinsurance.
- If a risk-sharing arrangement is eligible for credit, the amount by which required capital may be reduced is the lower of the deposit amount, or the portion of the marginal policy requirements for the policy that would be allocated to the policyholder under the risk-sharing formula.

### 3. Continued

- (c) Calculate the following:
- (i) Diversified Risk Requirement (D)
  - (ii) Undiversified Risk Requirement (U)
  - (iii) Adjusted Diversified Requirement (K)

State any assumptions and show your work.

**Commentary on Question:**

*The majority of candidates did not receive any points on this question. Calculations for this question came from Chapter 11 of the study note – the example listed in the study note provided a similar calculation of the required components.*

- Minimum value of  $I = \Sigma(IR_i - 0.5LT_i) + \text{P\&C risk} = 650\,000$
- $I = \text{Insurance risk requirement} = 761,903$
- $A = \text{Requirement for credit risk} = \text{credit risk} + \text{market risk} = 550,000$
- $D = \sqrt{(A^2 + A \times I + I^2)} = 1,141,071$
- $U = \Sigma IR_i + \text{P\&C risk} + A = 2,137,000$
- $LT = \Sigma LT_i = 965,000$
- $K = 0.8U + 0.1LT + \text{Max}[0; 0.233U - 0.116LT - 1.033D + D^2 / (U - 0.5LT)] = 1,806,100$

- (d) Assess the impact of K on LICAT ratios. Justify your response.

**Commentary on Question:**

*Most candidates generally did not score well on this question. Candidates were expected to describe how required capital and LICAT ratios would be impacted by changes in the adjusted diversified requirement (K) and by the difference between the Undiversified Risk Requirement (U) and K. The impact that K had on the LICAT ratio was discussed in chapter 1 of the study note and illustrated in the example in chapter 11.*

- A higher value of K means a higher base solvency buffer (BSB) and thus a lower LICAT ratio
- Results in a reduction to account for “double-counting” since individual risks are related to each other. In other words, risk aggregation creates a diversification benefit/credit – the sum of individual risks (U) is greater than the aggregated diversified risk (K)
- Using U or K in the BSB formula would produce a higher BSB and thus reduces the LICAT ratio. In other words, the diversification credit reduces the BSB and in turn increases the LICAT ratio.



#### **4. Learning Objectives:**

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

#### **Learning Outcomes:**

- (6c) 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.
- (6e) Describe current issues faced by governments, employers and employees related to post-retirement and post-employment benefits

#### **Sources:**

GHFV-650-15: Supplement Calculation Note for IAS 19

GHFV-668-16: The New Reality of Retiree Benefits

GHFV-669-16: The End of Retiree Benefits

GHFV-632-13: IAS19

GHFV-667-16: Hicks Morley Pension and Benefits–2013 Case Law Update, pp. 62-70

#### **Commentary on Question:**

*This was a question pertaining on Canadian retiree benefits, requiring significant recall on the calculation of post-retirement benefit liabilities and expenses according to IAS19. It also required candidates to accurately recall a specific case study as well as current issues faced by employers on retiree benefits. Candidates did much better on the writing portions than on the calculation portion.*

#### **Solution:**

- (a) Create a memo to the CFO suggesting plan design options to reduce the company's retiree benefit obligation.

#### **Commentary on Question:**

*Most candidates scored fairly well on this question. It was preferred that candidates put their response in a memo format citing at least the intended recipient and writer, although an email format was also accepted. The plan design options to reduce the company's retiree benefit obligation were taken from GHFV-669-16: The End of Retiree Benefits, page 2.*

## 4. Continued

To: Nexon CFO  
From: Consulting Actuary  
Date: October 1, 2021  
Subject: Options to Reduce Nexon's Retiree Benefit Obligation

This memo outlines a number of options that Nexon could consider to reduce the organization's retiree benefit obligation.

- Modify the current retiree plan design to introduce cost containment features such as:
  - Annual or lifetime limits
  - Cost sharing through co-payments or contributions
- Modify eligibility requirements for the post-retirement benefit plan
  - Requiring a longer amount of service to be eligible for Nexon's post-retirement benefit plan will help reduce turnover, incentivizing current employees to remain with the organization.
- Replace traditional benefits with healthcare spending accounts
- Provide only catastrophic coverage
  - Focus plan sponsor's funds on elements of greater value in a group purchasing arrangement.
- Retiree-pay-all plan
  - Simply arrange access to insurer-provided plans at the retirees' cost
  - Nexon could also sponsor the plan and would maintain governance and administration (i.e. collecting premiums, changing design and adapting it to legislative changes, negotiating with providers, answering retiree calls, etc.).
- Offer an insurer's conversion product to retiring employees.
  - Allows retirees who participated in an active group plan to purchase individual retiree coverage, at their own cost, from the same insurer without the need to provide evidence of good health.
- Preferred Vendor Approach
  - Independent firm acts as a sponsor of a voluntary retiree program to be offered to their clients' retirees.
  - After a due diligence review, the company selects the insurer to offer competitive benefits, premiums and services.
- DC plans where employers contribute toward an account that is used to fund benefit needs in retirement.
  - Would also be an attractive option to Canadian employers if tax-efficient vehicles become available to accumulate these funds.

## 4. Continued

- Retiree Exchange
  - Places insurers' products in competition to drive costs down over time and transfer administration to a third party
  - Reducing costs for employers and retirees.

Please feel free to reach out if you have any questions or would like to discuss further.

- (b) Identify issues associated in making changes to the retiree benefit plan for the following groups:
- (i) Existing retirees
  - (ii) Employees who are several years away from retirement
  - (iii) Employees who are close to retirement
  - (iv) New employees

### **Commentary on Question:**

*Most candidates did score well on this question and were able to identify at least one issue associated with each of the groups listed. Issues were taken from the study note "GHFV-668-16: The new reality of retiree benefits".*

- (i) **Existing Retirees**
  - Decision making should be straight-forward for this group.
  - Organizations need to carefully review their ability to make changes.
  - Minor changes to existing benefits structure, such as updating reasonable and customary limits, or annual or lifetime caps, can help modernize the plan when the environment has changed.
- (ii) **Employees who are several years away from retirement**
  - Sufficient notice can be provided so there are fewer contentious issues associated with the change.
  - Employer needs to deal with communication issues and changes to future promised benefits.
- (iii) **Employees who are close to retirement**
  - Most challenging group to address.
  - Employers often feel a responsibility to maintain benefits for long-service employees.
  - Legal issues surrounding notice of change are important to consider.

## 4. Continued

(iv) **New hires**

- Easiest group to make decisions for is the group of employees who will start working tomorrow.
- These employees have no strong expectations or history of legacy plans.

- (b) Compare the situation of Nexon to the one described in the Lacey v. Weyerhaeuser Co case heard in British Columbia's Supreme Court.

**Commentary on Question:**

*The situation referenced was based upon the study note: "GHFV 667-16: Hicks Morley 2013 Case Law Update". Candidates were expected to identify and list similarities between the two situations. Most candidates mentioned the point about communicating benefits without a formal contract, but very few candidates received full marks.*

- Both situations have fully funded retiree benefits
- In both cases, the company said employees (as communicated in benefit handbooks for example) that they would voluntarily pay for their retiree benefits; however, they did not provide a description in any written contract.
- Both companies were dealing with non-unionized employee groups

- (d) Describe the rationale behind the decision of the Supreme Court of British Columbia in Lacey v. Weyerhaeuser Co.

**Commentary on Question:**

*The situation referenced was based upon the study note: "GHFV 667-16: Hicks Morley 2013 Case Law Update". No candidates received full credit; however, most candidates were able to identify a few items, earning partial credit.*

The following reasons led to the decision by the Supreme Court of British Columbia to require the employer to continue to offer fully-funded extended health coverage to retirees:

- Retiree benefits were considered to be deferred compensation for employees and not gratuitous or discretionary perks
- The communications were not simply descriptions but promises
- The retiree benefit plan was considered to be a unilateral contract confirmed by the employees' continued work
- Benefits vested at retirement
- The employer did not reserve the right to terminate the retiree benefits due to the vested status
- Stronger language was needed to authorize the employer to make changes to the retiree benefits

## 4. Continued

- (e) Calculate the estimated change in the 2021 defined benefit cost for the retiree benefit plan due to the above plan changes. State any assumptions and show your work.

### **Commentary on Question:**

*The question asked candidates to calculate the difference in the 2021 defined benefit cost (service cost + interest cost) for the retiree benefit plan due to the plan design change. No candidates correctly calculated the difference in defined benefit cost, instead the majority of candidates calculated the difference in the 2021 defined benefit obligation as a result of the plan design change. Very few candidates correctly calculated each step listed below. Partial credit was awarded for methodology/formulae. The methodology to calculate the defined benefit cost can be found in “GHFV-650-15: Supplemental calculation note for IAS 19” and in “GHFV-632-13: IAS 19”.*

### **Step 1 – Calculate the current interest cost and defined benefit cost in 2021**

- Interest cost in 2021 = DBO at 31.12.2020 x 0.025 + Service Cost 2021 x 0.025 - Expected Benefit Payments in 2021 x .025 x 0.5
- = 75,730,000 x 0.025 + 3,732,000 x 0.025 - 630,000 x 0.025 x 0.5
- = **\$1,978,675**
- 2021 defined benefit cost = service cost in 2021 + interest cost in 2021
- = \$3,732,000 + \$1,978,675
- = **\$5,710,675**

### **Step 2 – Calculate the new DBO due to the elimination of lifetime benefits for active employees under age 50**

- New DBO at December 31, 2021 = DBO for Active Under Age 50 x (1 - 0.65) + DBO for Actives Over Age 50 + DBO for Retirees
- = \$42,400,000 x (1 - .65) + 22,680,000 + 10,650,000
- = **\$48,170,000**

### **Step 3 – Estimate the increase in the DBO due to the addition of the HCSA for active employees under age 50**

- Full eligibility age = age 55 and 5 years of service
- Estimated DBO at December 31, 2021 = Number of Actives Under Age 50 x \$3,000 per year x  $v^{(60 - 42)}$  x Age 60 Ten (10) Year Temporary Annuity Deferred to Age 65 x Accrued Service / Total Projected Service at Full Eligibility Age
- = 800 x \$3,000 x  $(1.025)^{(42-60)}$  x 7.5 x 13 / (55 - 42 + 13)
- = **\$5,770,493**

## 4. Continued

### Step 4 – Estimate total DBO at December 31, 2021

- = New DBO at 31.12.2020 (After Plan Change to End Benefits at Age 65) + Estimated DBO for HCSA at 31.12.2020
- = DBO from Step 2 + Estimated DBO from Step 3
- = \$48,170,000 + \$5,770,493
- = **\$53,940,493**

### Step 5 – Estimate new service cost in 2021 based on the plan design change

- New service cost in 2021 = Estimated New Service Cost in 2021 for Active Employees Under Age 50 + Service Cost for Active Employees Over Age 50
- New Service Cost Employees under age 50 = New 2021 Service Cost for Active Under Age 50 (Benefits to Age 65) + Service Cost for Actives Under Age 50 for HCSA
- = Old Service Cost x (1 - Reduction Factor) + Estimated DBO for HCSA / Accrued service
- = \$3,120,000 x (1 - 0.65) + \$5,770,493 / 13 years
- = \$1,535,884
- New service cost in 2021 = \$1,535,884 + \$612,000
- = **\$2,147,884**

### Step 6 – Calculate the new defined benefit cost in 2021 (after the plan design change)

- Interest cost in 2021 = New DBO at 31.12.2020 x 0.025 + New Service Cost 2021 x 0.025 - Expected Benefit Payments in 2021 x .025 x 0.5
- = 53,940,493 x 0.025 + 2,147,884 x 0.025 - 630,000 x 0.025 x 0.5
- = **\$1,394,334**
- 2021 defined benefit cost = service cost (post plan design change) in 2021 + interest cost (post plan design change) in 2021
- = \$2,147,884 + \$1,394,334
- = **\$3,542,219**

### Step 7 – Calculate the change in the 2021 defined benefit cost

- Change in 2021 defined benefit cost = 2021 defined benefit cost (before plan design change) – estimated 2021 defined benefit cost (after plan design change)
- = \$5,710,675 - \$3,542,219
- = **\$2,168,456**

## 4. Continued

- (f) Recommend next steps for Nexon to proceed to amend its post-retirement benefits. Justify your answer.

**Commentary on Question:**

*Most candidates were able to achieve full credit. Candidates were able to correctly recommend next steps for Nexon to proceed with. The question asked candidates to justify their answer, however, full credit was awarded for listing at least two recommendations.*

- Don't make changes for existing retirees of high-service employees
- Ask a legal firm to review documentation
- Change plan wording to explicitly allow Nexon to change the retiree benefit plan
- Current retirees are likely vested and cannot change. Therefore, focus should be directed to change the benefit plan for future retirees (i.e., new hires, younger employees and employees with low-service)
- Provide enough time - any changes will take time since expectations with actives will need clear communication
- Make smaller changes to the plan design (i.e., deductibles, coinsurance, drug formulary, etc)

## 5. Learning Objectives:

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

### Learning Outcomes:

- (4e) Compare key differences and similarities in measures by accounting basis.
- (4g) Explain fair value accounting principles and describe International Accounting Standards (IAS).
- (4h) Construct basic financial statements and associated actuarial entries for a life and health insurance company.

### Sources:

GHFV-707-21: IFRS 17 and the Appointed Actuary in Canada

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)

IFRS 17 Insurance Contract Examples

### Commentary on Question:

*In general, candidates performed better on parts a and c while part b, d and e needed more work.*

### Solution:

- (a) List the key differences in comparing a valuation under IFRS 17 to the current valuation practice under Canadian GAAP.

### Commentary on Question:

*This question was designed to test the understanding of how IFRS 17 compares to Canadian GAAP. In general, this question was well answered by many candidates. Candidates were required to have 4 of the 6 items listed below to receive full credit.*

- IFRS 17 requires a base calculation of a present value of future cash flows, which is clearly an actuarial calculation that the actuary will perform but this calculation must use an unbiased estimate of future experience and a discount rate that is consistent with IFRS 17 requirements.
- A separable risk adjustment must be added to the base present value, but the strength of that risk adjustment is intended to reflect the compensation that the entity requires for accepting the risk of uncertainty of the non-financial assumptions alone and thus is not solely determined by the actuary.



## 5. Continued

- The explicit risk adjustment allowed is restricted to reflecting non-financial risk. The calculation of the present value of future cash flows is intended to reflect a market consistent provision for financial risk, without additional margins.
  - The derivation of the discount rate used in the base valuation as defined in the IFRS 17 standard reflects current yields in the market and is independent of both assets actually held and reinvestment strategies planned. Accordingly, the risk of asset and liability mismatch, including the assessment of the intention and ability of the entity to actually earn the assumed discount rate, is not addressed in the valuation.
  - Future expenses not directly attributable to the costs of administering the business in force and settling claims are not included in the projected future cash flows.
  - The valuation of policy liabilities is calculated without recognition of future deferred taxes.
- (b) Describe how IFRS 17 will impact the role of the appointed actuary.

### **Commentary on Question:**

*This question was designed to test the understanding of how IFRS 17 will impact the role of appointed actuary. In general, this question was not well answered by most candidates.*

- The actuarial valuation performed for Canadian GAAP reporting has for years been the sole valuation needed in Canada for public and regulatory reporting purposes and the methods and assumptions have until now been left up to the profession to define in its SOP.
  - Also left to our SOP was the wording of the opinion on the valuation that the actuary should include in any report to the policyholders, shareholders, and regulator.
- Under IFRS 17, the actuary will be tasked for the first time to perform a valuation where the methodology and the approach to assumptions, and the overall accounting framework driving the financial statements, is controlled by an independent standard-setting party.
- The new accounting framework incorporates at its core an approach to valuation that is fundamentally different from existing accepted actuarial practice in Canada.
  - This valuation approach was developed specifically for international GAAP reporting and not for regulatory monitoring or solvency assessment purposes, which are outside their purview.
  - Under IFRS 17, the accounting profession in Canada is no longer ceding control over the valuation to the actuarial profession, as this measurement is specifically addressed by the IFRS 17 Standard and is intended to be universally applied among adopting national jurisdictions.

## 5. Continued

- Yet the formal role of the Appointed Actuary in Canada as defined in the ICA will still require a report and presumably a standard opinion on the results of the valuation as well as opinions related to other components of the actuary's role, and the CIA still requires that the valuation of policy liabilities be in accordance with accepted actuarial practice.
    - Accordingly, fundamental questions have to be answered about how to continue this historic multifaceted role under IFRS 17 and most urgently, how the responsibility of the actuary for the total policy liabilities is construed given these changes.
- (c) Propose an appropriate measurement method for each of XYZ's products. Justify your answer.

### **Commentary on Question:**

*This question was designed to test the application of choosing appropriate measurement methods for various products of an insurance company. In general, this question was well answered by many candidates.*

Type of measurement method under IFRS 17:

- PAA: premium allocation approach
- GMA: general measurement approach (or BBA: building block approach)
- VFA: variable fee approach

Traditional Term life product

- Traditional life product is subject to GMA since this product has long term liabilities, with the coverage period expanded to multiple years.

Group insurance

- Product with short term liabilities (Life, Health and Dental) less than a year are eligible for PAA.
- For products with coverage period longer than a year (e.g. LTD, group annuities), one should consider if the LRC calculated under the PAA would not be materially different than that under the GMA.
  - If at inception of the group an entity expects significant variability in the cash flows that would affect the measurement of the liability then this would lead to a response of 'No', not eligible for PAA.

Special considerations should be given to the following situations:

- New business rate guarantees beyond one-year period.
  - Depending on the wording of the group contract, if XYZ has obligation to provide insurance coverages during the guaranteed period and has no right to cancel the contract, GMA should be applied.
  - Otherwise, it is eligible for PAA.

## 5. Continued

- Treatment of Disability claims.
  - LTD claims can be treated as Liability for Incurred Claim (LIC) or Liability for Remaining Coverage (LRC).
  - If LTD is treated as LIC, LTD contracts are eligible for PAA.
  - If treated as LRC, check LRC calculated under PAA vs. GMA.

(d) Create the reconciliation of:

- (i) Risk Adjustment
- (ii) Contractual Service margin

State any assumptions and show your work.

### Commentary on Question:

*Most candidates had difficulties answering the question, either not understanding the question was asking for a reconciliation or not understanding how to apply knowledge of risk adjustment and contractual service margin.*

(i) Reconciliation of Risk Adjustment (entire table is not shown)

Entry	Time 1	Time 2	...	Time 20
Opening	0	115,637	...	7,402
Changes Related to Future Services: New Business	118,882	0	...	0
Change Related to Future Services: Assumptions	0	0	...	0
Expected Cash Inflows	0	0	...	0
Expected Cash Outflows	0	0	...	0
Insurance Finance Expense	4,755	4,625	...	296
Changes Related to Current Services: Experience	0	0	...	0
Changes Related to Current Services: Release	(8,000)	(7,597)	...	(7,698)
Closing	115,637	112,666	...	0

- Changes related to future services: new business @ time 1 = NPV(expected risk adjustment CFs at 4% discounting)
- Insurance finance expense = (opening balance + changes related to future services: new business) x discount rate of 4%
- Changes related to current services: release = actual risk adjustment CFs
- Closing = sum of column

## 5. Continued

(ii) Reconciliation of Contractual service margin (entire table is not shown)

Entry	Time 1	Time 2	...	Time 20
Opening	0	65,696	...	1,544
Changes Related to Future Services: New Business	70,830	0	...	0
Change Related to Future Services: Assumptions	0	0	...	0
Expected Cash Inflows	0	0	...	0
Expected Cash Outflows	0	0	...	0
Insurance Finance Expense	2,833	2,628	...	62
Changes Related to Current Services: Experience	0	0	...	0
Changes Related to Current Services: Release	(7,967)	(7,868)	...	(1,605)
Closing	65,696	60,456	...	0

- Changes related to future services: new business @ time 1 = CSM at initial recognition
  - Insurance finance expense = (opening balance + changes related to future services: new business) x locked in CSM rate of 4%
  - Changes related to current services: release = sum of (opening, changes related to future service: new business, changes related to future service: assumptions, expected cash inflows, expected cash outflow, insurance finance expense, changes related to current services: experience) x coverage units reconciliation opening balance / sum of (coverage units reconciliation opening balance for all remaining periods)
  - Closing = sum of column
- (e) Construct a mock-up of a Profit and Loss statement under IFRS 17 for XYZ without providing any numbers.

### Commentary on Question:

*Most candidates were not able to identify how a profit and loss statement will look under IFRS 17.*

### Statement of Profit or Loss

#### Insurance Service Revenue

Release of CSM

Release of Risk Adjustment

Expected Claims

Expected Expenses

Recovery of Acquisition Cash Flows

**Total**

**5. Continued**

**Insurance Service Expense**

Claims Incurred

Expenses Incurred

Amortization of Acquisition Cash Flows

**Total**

**Other Expense**

**Financial Gain/Loss**

Investment Income

Insurance Financial Expense

**Total**

**Profit or Loss**

## **6. Learning Objectives:**

3. The candidate will understand how to describe and evaluate government programs providing health and disability benefits in Canada.
5. The candidate will understand how to evaluate the impact of regulation and taxation on insurance companies and plan sponsors in Canada.

### **Learning Outcomes:**

- (3b) Describe how private group insurance plans work within the framework of social programs in Canada.
- (5c) Understand the impact of the taxation of both insurance companies and the products they provide.

### **Sources:**

Morneau Shepell Handbook of Canadian Pension Benefit Plans, 17th Edition, 2020, Ch. 2, 17, 18, 19

GHFV-653-16: Telus Health Note: How Much Does that Drug Cost?

GHFV-644-17: TACCESS: An Advisor's Guide to Understanding How Taxes Impact Group Insurance Benefits in Canada

### **Commentary on Question:**

*Commentary listed underneath question component.*

### **Solution:**

- (a) List and describe the three recommendations of the Canadian Life and Health Insurance Association (CLHIA) to ensure affordable prescription drugs in Canada.

### **Commentary on Question:**

*All candidates received partial mark on this question, but no full mark was given. No candidate was able to fully recall the three recommendations made by CLHIA.*

To ensure affordable prescription drugs in Canada, the CLHIA recommends:

- That the mandate of PMPRB be reformed to achieve the lowest possible price for Canadians and examine ways to be more aggressive in using value-based pricing approaches to set prices to encourage pharmaceutical innovation.
  - The VBP approach would incorporate a wider set of factors when determining price, such as the burden of the illness in society, whether the drug addresses an unmet need, how innovative the drug is and the wider social benefits it offers.

## 6. Continued

- Where a brand drug is currently on a provincial formulary and a generic has been approved as bio-equivalent with the Canadian brand reference product by Health Canada, that the generic be automatically interchangeable without the need for additional review by the provinces an automatically listed to prevent the delay in substituting the generic.
  - There can be a lag between the time it takes the generic to be approved and deemed bio-equivalent by Health Canada and the province to list the generic as interchangeable, during which time the more costly brand product continues to be dispensed.
- Regardless of whether a drug is listed on a provincial formulary, generic price caps apply to all generic drug approved for sale within a given province, as generics not listed under the formulary are not subject to the same generic pricing controls as those on formulary.

(b) Calculate the 2021 salary increase that would be cost neutral for ABC. State any assumptions and show your work.

### Commentary on Question:

*All candidates received partial marks on this question, but no full mark was given. Most candidates did not calculate the appropriate impact for CPP and EI which resulted in marks deducted. Candidates failed to recognize that for higher income earners (i.e. those earning above EI maximum yearly insurable earnings and those earning above YMPE), salary increase has no impact on the employer paid EI / CPP amount.*

	2020 Cost	2021 Cost	Formula for 2020 Cost	
Benefit	\$176,640	\$0	Benefit	$\$176,640 = \$92 \times 160 \times 12$
EI	\$176,888	\$178,295	EI	$\$176,888 = 2.21\% \times (\$40,000 \times 50 + \$50,000 \times 30 + \$56,300 \times 80)$
CPP	\$425,318	\$431,165	CPP	$\$425,318 = 5.45\% \times [(\$40,000 - \$3,500) \times 50 + (\$50,000 - \$3,500) \times 30 + (\$60,000 - \$3,500) \times 40 + (\$61,600 - \$3,500) \times 40]$
WSIB	\$139,500	\$142,037	WSIB	$\$139,500 = 1.55\% \times \$9,000,000$
EHT	\$175,500	\$178,691	EHT	$\$175,500 = \$29,250 + 1.95\% \times (\$9,000,000 - \$1,500,000)$
<b>Total</b>	<b>\$1,093,846</b>	<b>\$930,188</b>	<b>Total</b>	<b>\$1,093,846</b>
Payroll	\$9,000,000	\$9,163,658	2020 payroll	\$9,000,000
<b>Total Cost</b>	<b>\$10,093,846</b>	<b>\$10,093,846</b>	<b>Total Cost</b>	<b>\$10,093,846</b>

Payroll Increase

1.82%

Using goal seek, calculate the payroll increase in order to maintain the total 2020 cost while reducing benefit amount to \$0

This gives 1.82%

### Notes

- Salary increase only impact employer cost for employees under EI maximum yearly insurable earnings of \$56,300
- Salary increase only impact employer cost for employees under Year's Maximum pensionable Earnings (YMPE) of \$61,600
- Salary increase impacts employer cost for all employees under the Annual Maximum Assessable Earning of \$100,000

## 6. Continued

- (c) Assess the impact of the proposed change for employees. Justify your answer.

**Commentary on Question:**

*All candidates received partial mark on this question, but no full mark was given.*

- Cost-effectiveness of directing funds to salary increase rather than supplemental medical plan depends on the employee's income and work location.
  - In most cases, there is a significant advantage for the employee to receive increased supplemental medical benefits as opposed to increased salary given the benefits plan is non-taxable (for most provinces).
  - Employees may perceive a greater value in receiving benefits such as physiotherapy coverage, prescription drug coverage, etc. as opposed to receiving a salary increase.
  - However, employees with little usage of the plan may perceive a greater value in receiving a salary increase.
- (d) Recommend cost saving options to address the CEO's concern regarding ABC's higher brand drug utilization relative to its peer companies. Justify your answer.

**Commentary on Question:**

*All candidates received partial mark on this question. Most candidates provided recommendation but failed to provide justification.*

- First, ensure that mandatory generic substitution is implemented to ensure payment for the lowest cost alternative.
- Alternatively, offering reimbursement of generics at a more generous level of reimbursement will encourage members and prescribers to use these products over newer, branded products.
- In addition, ABC can use the maximum allowable cost program to target limiting the cost to the lowest therapeutic alternative when more costly but similarly effective agents exist.



## 7. Learning Objectives:

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

### Learning Outcomes:

- (5b) Describe the major applicable laws and regulations and evaluate their impact.
- (5c) Understand the impact of the taxation of both insurance companies and the products they provide.

### Sources:

GHFV-644-17: TACCESS: An Advisor's Guide to Understanding How Taxes Impact Group Insurance Benefits in Canada

GHFV-621-19: Canadian Life and Health Insurance Association: Guideline G3, Group Life and Health Insurance

GHFV-671-16: CHLIA Guideline G4 – Coordination of Benefits

### Commentary on Question:

*In general, most candidates did not perform well on this question and then could not identify all regulations or understand applicable taxation.*

### Solution:

- (a) Explain how Another Day can offer each benefit in exhibit 1 on a tax-free basis for employees.

### Commentary on Question:

*The majority of candidates did well on this section. However, many candidates missed indicating that offering a health, dental or HCSA program must qualify as a private health services plan.*

- For Extended Health Care and Dental Benefits, the employers can provide these benefits to employees on a non-taxable basis, as long as the plan qualifies as a Private Health Services Plan (PHSP).
- For life insurance and AD&D, premiums that employers paid towards life insurance and AD&D for their employees are taxable to the employees. As such, Another Day is unable to provide life and AD&D insurance on a tax-free basis to employees.
- For LTD and STD, employer paid premium is not considered a taxable benefit to the employee. However, benefits payable from the plan will be taxable.
- For health spending account, the contribution made by employer is not taxable to the employees. The expenses reimbursed to the employee are not taxable to employees, as long as the plan qualifies as a PHSP under the income Tax Act.

## 7. Continued

- (b) Calculate the total amount of taxes paid by Another Day for the HCSA benefit. State any assumptions and show your work.

**Commentary on Question:**

*Few candidates answered completely this question. Very few candidates have identified the correct premium tax or provincial tax. Finally, many candidates applied taxes on fees only and not on claims and fees.*

	Ontario	Quebec	BC
Claims %	50%	30%	20%
Premium Tax	2.00%	3.48%	N/A
Provincial sales tax	8.00%	9.00%	N/A

	All Employees	Ontario	Quebec	BC
Claims	\$500,000	\$250,000	\$150,000	\$100,000
Fees (prorated in the same proportion as claims)	\$21,000	\$10,500	\$6,300	\$4,200
Total claims and fees	\$521,000	\$260,500	\$156,300	\$104,200
Premium tax (on total claims and fees)	\$10,649	\$5,210	\$5,439	\$0
Provincial sales tax (on total claims and fees)	\$34,907	\$20,840	\$14,067	\$0
Total taxes	\$45,556	\$26,050	\$19,506	\$0

	Provincial Sale		
	Premium Tax	Taxes	Total
Ontario	\$5,210	\$20,840	\$26,050
Quebec	\$5,439	\$14,067	\$19,506
BC	\$0	\$0	\$0
Total	\$10,649	\$34,907	\$45,556

- (c) Calculate the change in the out-of-pocket amount for Jack's family resulting from this plan change. State any assumptions and show your work.

**Commentary on Question:**

*Many candidates had difficulties identifying how the reasonable and customary amount would impact the cost after the plan design change.*

## 7. Continued

Jack's Plan - Maximum	\$200
Nichole's Plan - Maximum	\$500
R&C for Another Day	\$220
Incurred claim	\$300

(i)

### **Prior to the change**

Nichole's plan pay	\$240
Jack's plan pay	\$60
<hr/>	
out of pocket	\$0

The second payer limits its payment to the lesser of (a) the amount that would have been payable had the plan been the first payer (b) 100% of the eligible expense reduced by all benefits paid for the same expenses by the first payer

### **After the change**

(a) amount that would have been payable had the plan been the first payer	\$200
(b) 100% of all eligible expenses reduced by all benefits paid for the same expenses by the first payer	\$0
<hr/>	
Nichole's plan pay	\$240
Jack's plan pay	\$0
<hr/>	
out of pocket	\$60

Change in the out-of-pocket amount \$60

- (d) Describe the replacement contract provisions needed to protect current covered employees from loss of insurance.

### **Commentary on Question:**

*Most candidates had difficulties identifying any of the contract provisions.*

- Any member whose insurance was terminated solely because of the contract termination and is eligible for insurance under the terms of the replacing contract shall be insured under the replacing contract.
- The member's insurance amount shall be the lesser of the amount the member is eligible for under the replacing contract and the insured amount under the terminating contract.
- Insurance under the replacing contract shall become effective on the later of the date coverage terminates on the terminating contract and the effective date of the replacing contract.

## 7. Continued

- No one under the terminating contract on its termination date shall be ineligible under the replacing contract solely because that person was not actively at work on the effective date of the replacing contract.
- (e) Describe what will happen to members who are not actively at work at the termination date of the current insured contract.

**Commentary on Question:**

*Candidates did well in describing the first two points, however most missed identifying the last two.*

- Claims for disability income benefits shall be considered as if the contract had remained in force.
  - For group life contracts with a waiver of premium benefit, a claim for waiver of premium benefit shall be considered as if the contract had remained in force.
  - The life coverage shall be provided by the replacing insurer on a premium-paying basis when the terminating contract does not include a waiver of premium benefit or the member does not qualify for the waiver benefit.
  - No member who is receiving benefits under the terminating contract may receive duplicate benefits under the new contract.
- (f) Calculate the annual LTD employee cost for each category under a taxable arrangement versus a non-taxable arrangement. State any assumptions and show your work.

**Commentary on Question:**

*Candidates did well identifying the cost under the current arrangement. However, most candidates had issues incorporating taxes under the first two categories.*

- Annual premium calculation:

	Category 1	Category 2	Category 3
Annual Salary	\$30,000	\$50,000	\$70,000
Province	Ontario	Manitoba	BC
Volume	\$1,667	\$2,778	\$3,889
Annual premium	\$510.03	\$850.04	\$1,190.06

## 7. Continued

- Current arrangement (taxable) cost to an active employee = \$0 for all categories
- Category 1 non-taxable cost (annual):
  - Employee paid premium = \$510.03
  - RST =  $8\% * \$510.03 = \$40.80$
  - Total cost =  $\$510.03 + \$40.80 = \$550.83$
- Category 2 non-taxable cost (annual):
  - Employee paid premium = \$850.04
  - RST =  $8\% * \$850.04 = \$68.00$
  - Total cost =  $\$850.04 + \$68.00 = \$918.04$
- Category 3 non-taxable cost (annual):
  - Employee paid premium = \$1,190.06
  - RST = \$0
  - Total cost =  $\$2,190.06 + \$0.00 = \$1,190.06$