INSTRUCTIONS TO CANDIDATES

1. This 100 point examination consists of 63 questions divided into two sections. Section I contains 17 multiple choice questions worth 1 point each. Section II contains 46 problem and essay questions worth a total of 83 points.

2. To answer the multiple choice questions, use the short-answer card provided and a number 2 or HB pencil only. Mark your short-answer card during the examination period. No additional time will be allowed for this after the exam has ended. Please make your marks dark and fill in the spaces completely. Fill in that it is Spring 2004, and the exam number, 7-Canada.

Darken the spaces corresponding to your Candidate ID number. Five rows are available. If your Candidate ID number is fewer than 5 digits, include leading zeros. (For example, if your Candidate ID number is 987, consider that your Candidate ID number is 000987, enter a zero on the first row, 0 on the second row, 9 on the third row, 8 on the fourth row, and 7 on the fifth [last] row.) Please write in your Candidate ID number next to the place where you darken the spaces for your Candidate ID number. Your name, or any other identifying mark, must not appear on the short-answer card.

For each of the multiple choice questions, select the one best answer and fill in the corresponding letter. One quarter of the point value of the question will be subtracted for each incorrect answer. No points will be added or subtracted for responses left blank.

3. For the problem and essay questions, the number of points for each full question or part of a question is indicated at the beginning of the question or part. Answer these questions on the lined sheets provided in your Examination Envelope. Use dark pencil or ink. Do not use multiple colors.

Write your Candidate ID number and the examination number, 7C, at the top of each answer sheet. Your name, or any other identifying mark, must not appear.

Do not answer more than one question on a single sheet of paper. Write on only the lined side of the paper, and be careful to give the number of the question you are answering on each sheet.

CONTINUE TO NEXT PAGE OF INSTRUCTIONS

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The answer should be concise and confined to the question as posed. When a list of a specific size is requested, do not offer more items in your list than the number requested. For example, if you are requested to list three items, only the first three responses will be graded.

In order to receive full credit or to maximize partial credit on mathematical and computational questions, you must clearly outline your approach in either verbal or mathematical form, showing calculations where necessary. Also, you must clearly specify any additional assumptions you have made to answer the question.

4. Do all problems until you reach the last page of the examination where “END OF EXAMINATION” is marked.

5. All questions should be answered according to the Canadian statutory accounting practices and principles, unless specifically instructed otherwise. SAP refers to Statutory Accounting Principles, and GAAP refers to Generally Accepted Accounting Principles.

6. Your Examination Envelope is pre-labeled with your Candidate ID number, name, exam number, and test center. Do not remove this label. Keep a record of your Candidate ID number for future inquiries regarding this exam.

7. At the beginning of the examination, check through the exam booklet for any missing or defective pages. The supervisor has additional exams for those candidates who have defective exam booklets.

8. Candidates must remain in the examination center until two hours after the start of the examination. You may leave the examination room to use the restroom with permission from the supervisor. To avoid excessive noise during the end of the examination, candidates may not leave the exam room during the last fifteen minutes of the examination.

9. At the end of the examination, place the short-answer card and all answer sheets in the Examination Envelope. Please insert your answer pages in your envelope in question number order. Insert a numbered page for each question, even if you have not attempted to answer that question. BEFORE YOU TURN IN THE EXAMINATION ENVELOPE TO THE SUPERVISOR, BE SURE TO SIGN IT IN THE SPACE PROVIDED ABOVE THE CUT-OUT WINDOW.

Anything written in the examination booklet will not be graded. Only the short-answer card and the answer sheets will be graded.

10. If you have brought a self-addressed, stamped envelope, you may put the examination booklet and scrap paper inside and submit it separately to the supervisor. It will be mailed to you. (Do not put the self-addressed stamped envelope inside the Examination Envelope.)

If you do not have a self-addressed, stamped envelope, please place the examination booklet in the Examination Envelope and seal the envelope. You may not take it with you. Do not put scrap paper in the Examination Envelope. The supervisor will collect your scrap paper.

CONTINUE TO NEXT PAGE OF INSTRUCTIONS
Candidates may obtain a copy of the examination by contacting the CAS Office.

All extra answer sheets, scrap paper, etc., must be returned to the supervisor for disposal.

11. Candidates must not give or receive assistance of any kind during the examination. Any cheating, any attempt to cheat, assisting others to cheat, or participating therein, or other improper conduct will result in the Casualty Actuarial Society disqualifying the candidate's paper, and such other disciplinary action as may be deemed appropriate within the guidelines of the CAS Policy on Examination Discipline.

12. An examination survey and postage-paid reply envelope are included with the examination. No postage is necessary for surveys mailed within the United States. Candidates mailing the survey from outside the United States should use the courtesy reply envelope distributed by your exam supervisor. This survey is also available on the CAS website in the “Exams” section. Please complete the survey and leave it with the examination supervisor, or take the survey and envelope with you when leaving the examination center. Please submit the survey to the CAS Office by May 23, 2004. Please do not enclose the survey in the Examination Envelope.

END OF INSTRUCTIONS
SECTION I, QUESTIONS 1-17, MULTIPLE CHOICE QUESTIONS (1 POINT EACH)

1. The Canadian Bar Association Task Force on “Systems of Civil Justice in Canada” contends that the ideal legal system contains which of the following features?
   
   1. Use of the courts as the sole option for dispute resolution.
   2. Continued management by the courts.
   3. Rewards for consideration of early settlement.

   A. 1 only
   B. 2 only
   C. 3 only
   D. 1 and 3 only
   E. 2 and 3 only

2. According to The Canadian Medical Protective Association in “Proceedings of the Tort Reform Conference,” which of the following is a recommended option for medical malpractice tort reform?

   A. The Federal Income Tax Act should be amended to eliminate the need for gross-up in lump sum personal injury awards.
   B. Use of the collateral source rule should be expanded to help reduce the total benefits payable.
   C. Provincial governments should continue their right of subrogation of future health care costs.
   D. Limitation periods should allow for flexibility based upon the facts of the specific case.
   E. Periodic payments should only be permitted when agreed upon by both parties in a case.

3. Which of the following is an example of an insurance transaction matter covered under provincial insurance legislation?

   A. Insurable interest
   B. Designation of beneficiaries
   C. Duty to disclose
   D. Claims procedures
   E. Reinstatement

CONTINUED ON NEXT PAGE
4. Provinces have exclusive authority with respect to which of the following?

   1. Incorporation of insurance companies operating in the province.
   2. Rules about disclosure in negotiation of an insurance policy.
   3. Rules about salvage of an insured property.

   A. 2 only
   B. 3 only
   C. 1 and 2 only
   D. 1 and 3 only
   E. 2 and 3 only

5. Which of the following are roles of the Canadian Council of Insurance Regulators?

   1. Encourage uniform practices across the provinces.
   2. Engage in activities to promote a better public understanding of insurance.

   A. 1 only
   B. 2 only
   C. 1 and 3 only
   D. 2 and 3 only
   E. 1, 2, and 3

6. An auto insurer may use the file and use rating system in Ontario when:

   A. They are filing a change to territorial definitions used in their private passenger automobile risk classification system.
   B. They are filing a change to their motorcycle rates subject to major filing requirements.
   C. They are filing a change to their private passenger automobile rates under the “respond to market” guidelines.
   D. They are filing initial rates to enter the private passenger automobile insurance market.
   E. They are filing a change to endorsement OPCF 44R for private passenger automobile policies.

CONTINUED ON NEXT PAGE
7. According to Greene, "Government Insurers," which of the following is typically a characteristic of social insurance?

A. The element of compulsion.
B. Administered by the private sector.
C. Presence of a needs test.
D. Stability of total cost to the system.
E. Benefits directly related to premiums.

8. In Canada, which of the following types of in-force policies are excluded from the Property and Casualty Insurance Compensation Corporation's plan?

1. Medical malpractice
2. Life insurance
3. Crop insurance

A. 1 only
B. 2 only
C. 1 and 3 only
D. 2 and 3 only
E. 1, 2, and 3

9. Which of the following changes to automobile insurance in Alberta did the Insurance Bureau of Canada support, without qualification, in its submission to Alberta Finance on the Automobile Insurance Consultation Paper?

1. Reduce loss of income awards for income tax.
2. Increase accident benefits for persons with catastrophic injuries.
3. Allow an increase to compulsory accident benefits as an option.

A. 1 only
B. 2 only
C. 1 and 3 only
D. 2 and 3 only
E. 1, 2, and 3
10. The hard reinsurance market has prompted a number of companies to obtain protection from potential weather-related catastrophes through capital market financing. Which of the following are required to obtain regulatory approval for use of these instruments?

1. Risk transferred to investors that meet suitable counterparty standards.
2. Satisfaction of the provisions in Property and Casualty Borrowing Regulations.
3. Arrangements must not include any preconditions that delay capital infusion.

A. 1 only
B. 2 only
C. 1 and 3 only
D. 2 and 3 only
E. 1, 2, and 3

11. Which of the following government programs in Canada has a relationship between the contributions made by an individual and the benefits received by the individual?

A. Old Age Security
B. Guaranteed Income Supplement
C. Canada Pension Plan
D. Medicare
E. Workers’ Compensation

12. According to KPMG, et al., “Motor Vehicle Insurance in British Columbia – At the Crossroads, Volume I: The Case for Change,” which of the following was identified as one of the reasons explaining the growth in the number and cost of automobile bodily injury claims in British Columbia?

A. Increased amount driven per vehicle.
B. Increased traffic congestion in urban areas.
C. Increased compensation for general damages.
D. Rate of inflation on medical services exceeded overall inflation.
E. An aging population.
13. Insurance risk can be comprised of uncertainties relating to the ultimate amount of net cash flow from which of the following?

1. Premiums
2. Claims and claims settlement expenses
3. Investment returns

A. 2 only
B. 3 only
C. 1 and 2 only
D. 1 and 3 only
E. 1, 2, and 3

14. Which of the following best describes Deferred Policy Acquisition Costs?

A. It is a SAP concept since it accounts for all policy acquisition costs.
B. It is a GAAP concept since it accounts for all policy acquisition costs.
C. It is a SAP concept since it provides a matching of revenues and expenses.
D. It is a GAAP concept since it provides a matching of revenues and expenses.
E. It is a SAP concept since it focuses on the solvency of the insurer.

15. Which of the following describe the relationships between amounts carried in the P&C-1 and amounts shown on the Expression of Opinion in the Report of the Actuary?

2. The Deferred Policy Acquisition Expenses on page 20.10 must be less than or equal to the Maximum Policy Acquisition Expenses Deferrable in the “Actuary’s Estimate” column of the Expression of Opinion.

A. 1 only
B. 2 only
C. 1 and 3 only
D. 2 and 3 only
E. 1, 2, and 3

CONTINUED ON NEXT PAGE
16. Under the Minimum Capital Test for property and casualty insurers in Canada, “Capital Available” includes which of the following amounts?

1. An adjustment to market value for investments
2. Subordinated indebtedness
3. Off-balance sheet derivative instruments

A. 1 and 2 only
B. 1 and 3 only
C. 2 and 3 only
D. 1, 2, and 3
E. None of A, B, C, or D

17. According to the Canadian Institute of Actuaries, “Educational Note: Discounting,” which of the following considerations should be taken into account by the appointed actuary when selecting the discount rate to be used for estimating a company’s actuarial liabilities?

1. Average historical investment yield for the industry.
2. Investment expense level for the company.
3. Future reinvestment rates of return.

A. 2 only
B. 3 only
C. 1 and 2 only
D. 1 and 3 only
E. 2 and 3 only

CONTINUED ON NEXT PAGE
18. (1.5 points)

With regard to personal injury cases, compare the process for how liability is assessed in product liability cases under contract theory versus tort theory.

19. (1.25 points)

In the context of indemnity insurance:

a. (0.75 point)

Describe the test for an insurable interest that has been adopted in Canada.

b. (0.25 point)

Identify the time at which the insurable interest must exist.

c. (0.25 point)

What is the consequence of not having an insurable interest in the subject matter?

20. (1.5 points)

Briefly describe three ways in which an insurer might be considered to have waived its right to refuse payment under an insurance contract.
21. (1 point)

For each of the following classifications of damages, identify one circumstance in which the plaintiff may recover it in a tort.

a. (0.5 point)

Nominal damages

b. (0.5 point)

Parasitic damages

22. (2 points)

With respect to personal injury cases under tort law:

a. (1 point)

Compare the types of loss that are considered “Special Damages” versus those that are considered “General Damages.”

b. (1 point)

Define the principle of *restitutio in integrum* and describe how this principle is applied to fatal accident actions.
23. (1 point)

Describe the federal government’s modifications to the doctrine of joint and several liability in response to the 1998 report by the Standing Senate Committee on Banking, Trade, and Commerce in Canada entitled “Joint and Several Liability and Professional Defendants.”

24. (2.5 points)

The decision in Dillon v. Guardian Insurance Co. highlights one of the fundamental differences between insurance contract law and general contract law.

a. (0.75 point)

What principle marked the fundamental difference highlighted in this case and how did it affect the decision rendered?

b. (0.25 point)

What onus is placed upon the insured with regard to this principle?

c. (1.5 points)

Identify and briefly describe three other ways in which insurance contract law differs from general contract law.

CONTINUED ON NEXT PAGE
25. (3 points)

A client desiring restitution provides a personal injury lawyer with the following details of an accident:
- The client slipped and fell on bleach that was spilled in a grocery store.
- As a result of the fall, the client re-injured a broken ankle that was in the process of healing.
- There were multiple witnesses to the accident.
- The bleach had been in the aisle for more than two hours without being removed.
- A caution sign had been placed in the aisle just after the bleach was spilled.
- At the time of the accident, the grocery store manager provided assistance to the client.
- The client’s first visit to a doctor was the day of the accident.
- The client’s broken ankle, which was nearly healed, now had new fractures.
- The bleach damaged the client’s clothing.
- The client, employed as an accountant, will likely not be able to work for several months due to the pain.
- The client had set aside his crutches in order to reach for an item on the top shelf at the time of the accident.
- The grocery store and their insurer (i.e., the defendants) are denying any liability due to the fact that the caution sign was clearly visible to all, the client was not using his crutches, and the client’s ankle was already broken.

a. (1.5 points)

Briefly discuss the likelihood of the following categories of damages being assessed against the defendants in this case and why:
1. Real damages
2. Exemplary damages
3. Aggravated damages

b. (1.0 point)

Discuss the defendants’ exposure to the following elements of personal injury damages:
1. Non-pecuniary losses
2. Pecuniary losses

c. (0.5 point)

How would this case differ, with regards to damages, if the client were unemployed at the time of the accident?
26. (1.5 points)

In “Canadian Tort Law,” Linden describes various methods to determine whether a cause of action for negligence can be established. Identify the components of the six-part division of negligence that Linden adopts.

27. (1.5 points)

You are given the following information:
- Two members of the Canadian Olympic Committee were traveling in British Columbia to oversee the construction of a pavilion for the upcoming Winter Olympics.
- The two members were traveling in a private passenger vehicle owned by one of them. Its owner operated the vehicle.
- The driver of the vehicle swerved to avoid a fallen tree lying across the road.
- The vehicle was forced down a steep embankment and both occupants of the vehicle sustained bodily injury.
- The occupants of the vehicle sued the government for negligence.
- The lawyers for the government argued that maintenance of the highway was part of the planning and policy function of government and thus the case should be dismissed.

What argument can be made for sending this case to trial? Include any precedent decisions that could be used to support this argument.

28. (1.5 points)

According to Baer and Rendall, “Cases on the Canadian Law of Insurance”:

a. (0.75 point)

Identify the three levels of insurance regulation.

b. (0.25 point)

Identify the level of regulation favoured by both superintendents of insurance and the insurance industry in recent years.

c. (0.5 point)

Why was the level of regulation identified in part b. above the favoured choice?
29. (3 points)

With regard to the case of *Broadhurst & Ball v. American Home*, answer the following:

a. (0.5 point)

What was the court’s decision regarding the allocation of defence costs between insurance companies American Home and Guardian?

b. (1.5 points)

Discuss the court’s reasoning for making the decision in part a. above.

c. (1 point)

Discuss the implications to the insurance industry from the decision in part a. above.

30. (1 point)

a. (0.5 point)

Is a weather derivative, where the insurer agrees to pay the insured a fixed sum if the temperature is above 0°C over some specified time frame, a contract of indemnity or not? Explain your answer.

b. (0.5 point)

Is this weather derivative a valued insurance policy? Explain your answer.
31. (4.5 points)

Provinces that are facing challenges with their automobile insurance markets are increasing their consideration of providing insurance directly through a public insurance system instead of through a private insurance system.

Both proponents and opponents of public insurance offer a number of arguments to support their positions.

a. (1 point)

Describe two arguments in favour of public insurance.

b. (1 point)

Describe two arguments against public insurance.

c. (2.5 points)

A newly-elected government in a province has decided to implement a public system of automobile insurance and has refused to renew the licences of the private insurers. The private insurers have decided to take legal action against the government. Describe in detail how legal counsel for the private insurers would advise their client to proceed in this matter. Include a reference to a specific case that could be used to provide that advice.
32. (2 points)

The Insurance Bureau of Canada (IBC) believes that the province of Alberta should implement an amendment that would eliminate the double recovery of income and expenses with respect to accident victim compensation for automobile insurance.

a. (0.5 point)

Explain what is meant by “double recovery” in this context.

b. (0.5 point)

What solution was proposed by the IBC that would eliminate double recovery? Explain your answer.

c. (0.5 point)

How might insurers use the change in part b. above in their rating and/or underwriting rules if there are no restrictions placed upon them? Explain your answer.

d. (0.5 point)

What social issue might the government need to address if insurers use the change in part b. above in their rating and/or underwriting rules? Explain your answer.
33. (1.75 points)

In 1984 the federal government introduced the Canada Health Act. It set out a number of conditions and criteria that a provincial health program must meet to be eligible for full federal funding. A number of provinces were recently considering the introduction of user fees.

a. (0.5 point)

In what manner will user fees contravene the Act?

b. (0.5 point)

Under what circumstances can user fees comply with the Act?

c. (0.75 point)

Discuss whether or not physicians are allowed to charge patients for medical services above the amount that can be reimbursed under the provincial plan's fee schedule.

34. (1.5 points)

Briefly describe the procedures of the Risk Sharing Plan administered by the "Groupement des assureurs automobile" in Québec. Include a description of the transfer process, the responsibility of the insurer, and how premiums, claims, and administrative expenses are shared.
35. (1 point)

The first list below contains possible grounds of refusal from an insurer to provide a fire insurance policy. The second list includes potential remedies for the insurer. For each of the grounds of refusal in the first list, match the best potential remedy from the second list. Each possible remedy from the second list can be used only once.

**Grounds of Refusal**
1. Physical risk
2. Claim frequency
3. False declaration
4. Animals

**Possible Remedies**
A. No remedy necessary, refuse the risk.
B. Exclude liability coverage.
C. Inspect the premises.
D. Increase the deductible.

36. (1.5 points)

It is often said that the Canadian Medicare system is financed on a pay-as-you-go basis.

a. (0.5 point)

Explain what is meant by the phrase “financed on a pay-as-you-go basis.”

b. (0.5 point)

According to the Canadian Institute of Actuaries in its submission to the Commission on the Future of Health Care in Canada, what concern has arisen with regards to this type of financing for the Canadian Medicare system?

c. (0.5 point)

Identify two other Canadian government programs that are financed on this basis.
37. (2.5 points)

According to the report “New Brunswick Canada – Government Response to the Report of the Select Committee on Private Passenger Automobile Insurance,” the government of New Brunswick introduced a change to its review of automobile insurance rates in the province.

a. (0.5 point)

Identify the change to the review of automobile insurance rates that the government introduced.

b. (0.5 point)

Identify two reasons given for the change made in part a. above.

c. (1.5 points)

The government of New Brunswick also plans to impose new regulatory requirements with respect to automobile insurance by amending the Insurance Act. Describe three requirements resulting from these proposed amendments.

38. (1.5 points)

Briefly describe three manifestations of social inflation on insurance claims.
39. (1 point)
   
   a. (0.25 point)
   
   When does measurement uncertainty exist in the presentation of financial statements?
   
   b. (0.75 point)
   
   Identify three disclosures that may be found in the Notes to the Financial Statements if measurement uncertainty exists.
   
40. (1 point)

A consulting actuary is preparing a Dynamic Capital Adequacy Testing (DCAT) report for an insurer. The insurer has provided the actuary with a business plan that shows forecasted loss ratios of 70% for each of the next two years. The actuary reviews the company's experience and finds that the insurer has not had a loss ratio below 85% in the past three years. The insurer has not had any substantial changes to its mix of business or its business practices during the past year. Also, the company has not taken any rate increases greater than the level of inflation.

Briefly comment on how the actuary should treat this information in the DCAT report.
41. (3 points)

Using the following information about property and casualty insurance companies A and B, answer the questions specified in parts a. to c. Show all work.

<table>
<thead>
<tr>
<th>Item</th>
<th>Company A</th>
<th>Company B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surplus as at December 31, 2001</td>
<td>$95,000</td>
<td>$120,000</td>
</tr>
<tr>
<td>Surplus as at December 31, 2002</td>
<td>100,000</td>
<td>130,000</td>
</tr>
<tr>
<td>Surplus as at December 31, 2003</td>
<td>120,000</td>
<td>120,000</td>
</tr>
<tr>
<td>Net Risk Ratio as at December 31, 2002</td>
<td>270.0 %</td>
<td>200.0 %</td>
</tr>
<tr>
<td>Net Risk Ratio as at December 31, 2003</td>
<td>325.0 %</td>
<td>216.7 %</td>
</tr>
</tbody>
</table>

- Assume that neither company has any reinsurance.
- Ignore all effects of discounting.
- There have been no rate level changes since January 1, 2001.

a. (1.25 points)

Which company is showing faster premium growth in 2003? Provide evidence to support the choice.

b. (1.25 points)

For the company with faster premium growth in 2003, comment on the level of risk the company is undertaking and any actions that can be taken to mitigate that risk.

c. (0.5 point)

For the company with slower premium growth in 2003, identify two possible causes for the change in surplus.

CONTINUED ON NEXT PAGE
42. (6 points)
Given the following information for a Canadian insurer from its P&C-1 for 2003, evaluate the insurer’s financial health. Show all work.

<table>
<thead>
<tr>
<th>P&amp;C-1 Item</th>
<th>P&amp;C-1 Page</th>
<th>Amount ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Premiums Written</td>
<td>20.30</td>
<td>10,000</td>
</tr>
<tr>
<td>Net Premiums Written</td>
<td>20.30</td>
<td>5,000</td>
</tr>
<tr>
<td>Net Premiums Earned</td>
<td>20.30</td>
<td>4,700</td>
</tr>
<tr>
<td>Total Acquisition Expenses</td>
<td>20.30</td>
<td>1,000</td>
</tr>
<tr>
<td>General Expenses</td>
<td>20.30</td>
<td>850</td>
</tr>
<tr>
<td>Investment Operations – Income</td>
<td>20.30</td>
<td>400</td>
</tr>
<tr>
<td>Investment Operations – Recognized Gains (Losses)</td>
<td>20.30</td>
<td>300</td>
</tr>
<tr>
<td>Investment Operations – Expenses</td>
<td>20.30</td>
<td>50</td>
</tr>
<tr>
<td>Total Income Taxes</td>
<td>20.30</td>
<td>0</td>
</tr>
<tr>
<td>Direct claims incurred, including adjustment expenses</td>
<td>60.20</td>
<td>6,400</td>
</tr>
<tr>
<td>Net claims incurred, including adjustment expenses</td>
<td>60.20</td>
<td>3,400</td>
</tr>
<tr>
<td>Cash</td>
<td>20.10</td>
<td>100</td>
</tr>
<tr>
<td>Bonds (expiring in more than one year)</td>
<td>20.10</td>
<td>7,200</td>
</tr>
<tr>
<td>Common Shares</td>
<td>20.10</td>
<td>1,000</td>
</tr>
<tr>
<td>Receivables from Agents and Brokers (due in less than 60 days)</td>
<td>20.10</td>
<td>800</td>
</tr>
<tr>
<td>Recoverables from Reinsurers, Unpaid Claims and Adj. Expenses</td>
<td>20.10</td>
<td>5,000</td>
</tr>
<tr>
<td>Recoverables from Reinsurers, Unearned Premiums</td>
<td>20.10</td>
<td>1,600</td>
</tr>
<tr>
<td>Deferred Policy Acquisition Expenses (DPAE)</td>
<td>20.10</td>
<td>800</td>
</tr>
<tr>
<td>Unpaid Claims and Adjustment Expenses</td>
<td>20.20</td>
<td>10,800</td>
</tr>
<tr>
<td>Unearned Premiums</td>
<td>20.20</td>
<td>3,600</td>
</tr>
<tr>
<td>Unearned Commissions</td>
<td>20.20</td>
<td>400</td>
</tr>
<tr>
<td>Capital Required for Reinsurance Ceded to Unregistered Insurers</td>
<td>30.70</td>
<td>0</td>
</tr>
<tr>
<td>Capital Required for the following assets combined: Cash, Bonds, Common Shares, Receivables from Agents and Brokers, DPAE</td>
<td>30.71</td>
<td>610</td>
</tr>
</tbody>
</table>

- The insurer has no assets or liabilities other than those listed above.
- For bonds, 50% are government grade and 50% are not-investment grade.
- The market value of invested assets is equal to its book value.
- All business is classified as Personal Automobile (Auto) written in the province ZZ.
- The company’s booked policy liabilities are always equal to the actuary’s estimate.
- Unpaid claims run-off has never produced any material redundancies/deficiencies.
- Unpaid claims are 90% Auto Liability/Personal Accident and 10% Auto Other.
- The company has no exposure to earthquake, nuclear, or mortgage insurance.
- The company cedes 45% of direct premiums under a quota share agreement, with the remainder of cessions under a catastrophe/excess of loss program.
- Province ZZ introduced new legislation requiring all insurers writing in the province to reduce Auto premiums by 20% across the board, starting January 1, 2004. This is accompanied by legislation reducing benefits to claimants, along with rule changes, starting January 1, 2004. The government estimates the reduction in loss costs to be about 20% of the current average industry loss cost. A well-respected industry research group produced an actuarial report suggesting the reduction is only 5%.
- The province has always had a prior approval rating system with a take-all-comers rule.
- Another company writing in the province, with a substantial market share, has withdrawn from the market after paying a penalty of $3 million to the government.
- No other information is available.

CONTINUED ON NEXT PAGE
43. (2 points)

The Dynamic Capital Adequacy Testing (DCAT) of a federally-regulated Canadian property and casualty insurer indicates the following surplus and Minimum Capital Test ratios (MCT) under the four most adverse scenarios, as at December 31, 2003.

<table>
<thead>
<tr>
<th>Lowest in Forecast Period</th>
<th>Base Scenario</th>
<th>Reinsurance Risk (insolvency)</th>
<th>Misestimation of Policy Liabilities (Unpaid Claims)</th>
<th>Frequency/Severity (Loss Ratio)</th>
<th>Premium Volume (Increase)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surplus</td>
<td>$200,000</td>
<td>$125,000</td>
<td>$140,000</td>
<td>$165,000</td>
<td>$175,000</td>
</tr>
<tr>
<td>MCT</td>
<td>225%</td>
<td>141%</td>
<td>158%</td>
<td>186%</td>
<td>197%</td>
</tr>
</tbody>
</table>

Based on the information above, answer the following:

a. (0.5 point)

Is the insurer’s financial condition satisfactory? Explain your answer.

b. (0.25 point)

Under which scenario is the Office of the Superintendent of Financial Institutions most likely to intervene? Explain your answer.

c. (0.25 point)

Identify a possible management response to the Premium Volume (Increase) scenario.

d. (0.25 point)

Identify a possible ripple effect for the Frequency/Severity (Loss Ratio) scenario.

e. (0.75 point)

The company above has ceded unpaid claims to only one reinsurer. Assume that four months after the DCAT report is issued, it is discovered that the company’s only reinsurer had misstated their financial statements and are likely to be insolvent at the end of the coming year. What should be done in the context of the DCAT?

CONTINUED ON NEXT PAGE
44. (2 points)

Identify four ways in which Schedule P of the U.S. Annual Statement provides more information to an actuary than page 60.40 of the Canadian P&C-1 with regard to accident year claims information.

45. (0.75 point)

The following information is available for a Canadian property and casualty insurer:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Unearned Premiums Reserves (UPR)</td>
<td>$15,000</td>
</tr>
<tr>
<td>Expected Loss Ratio underlying the Gross UPR</td>
<td>75%</td>
</tr>
<tr>
<td>Expected Internal Adjustment Expense Ratio underlying the Gross UPR (as a % of gross incurred losses)</td>
<td>10%</td>
</tr>
<tr>
<td>General Expense Ratio (as a % of premium)</td>
<td>9%</td>
</tr>
<tr>
<td>Ratio of Maintenance Expenses to General Expenses</td>
<td>30%</td>
</tr>
<tr>
<td>Contingent Commission Ratio (as a % of premium)</td>
<td>1%</td>
</tr>
<tr>
<td>Deferrable Expense Ratio (as a % of premium)</td>
<td>15%</td>
</tr>
</tbody>
</table>

Using the information above, determine the Deferred Policy Acquisition Expense that should be recorded in this insurer’s Balance Sheet. Assume no reinsurance, no investment income and no discounting. Show all work.
46. (1.25 points)

Using the following information for a Canadian insurer from page 80.10 of its P&C-1, calculate the items specified in parts a. to d. Show all work.

<table>
<thead>
<tr>
<th>P&amp;C-1, page 80.10 item</th>
<th>Amount ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred Commissions at beginning of year</td>
<td>600</td>
</tr>
<tr>
<td>Unearned Commissions at beginning of year</td>
<td>500</td>
</tr>
<tr>
<td>Commissions in respect of premiums written: Direct</td>
<td>1,300</td>
</tr>
<tr>
<td>Commissions in respect of premiums written: Reinsurance Assumed</td>
<td>0</td>
</tr>
<tr>
<td>Commissions in respect of premiums written: Reinsurance Ceded</td>
<td>400</td>
</tr>
<tr>
<td>Deferred Commissions end of year</td>
<td>650</td>
</tr>
<tr>
<td>Unearned Commissions end of year</td>
<td>450</td>
</tr>
<tr>
<td>Contingent Commissions</td>
<td>250</td>
</tr>
<tr>
<td>Other Non-Deferrable Commissions</td>
<td>0</td>
</tr>
</tbody>
</table>

a. (0.5 point)

P&C-1 page 80.10, Net Commissions attributable to the year

b. (0.25 point)

P&C-1 page 80.10, Commission Expense

c. (0.25 point)

P&C-1 page 80.10, Commission Income

d. (0.25 point)

P&C-1 page 20.30, Acquisition Expenses: Commissions

CONTINUED ON NEXT PAGE
EXAM 7 - CANADA, SPRING 2004 - SECTION II

47. (1.75 points)

Using the following information for a Canadian insurer from pages 20.30 and 20.40 of its P&C-1, calculate the items specified in parts a. to e. Show all work.

<table>
<thead>
<tr>
<th>P&amp;C-1, page 20.30/20.40 item</th>
<th>Amount ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Premiums Written</td>
<td>750</td>
</tr>
<tr>
<td>Decrease (increase) in Net Unearned Premiums</td>
<td>(80)</td>
</tr>
<tr>
<td>Service Charges</td>
<td>15</td>
</tr>
<tr>
<td>Net Claims and Adjustment Expenses</td>
<td>450</td>
</tr>
<tr>
<td>Commissions</td>
<td>80</td>
</tr>
<tr>
<td>Taxes</td>
<td>25</td>
</tr>
<tr>
<td>General Expenses</td>
<td>50</td>
</tr>
<tr>
<td>Investment Operations - Income</td>
<td>300</td>
</tr>
<tr>
<td>Investment Operations – Recognized Gains (Losses)</td>
<td>(50)</td>
</tr>
<tr>
<td>Investment Operations - Expenses</td>
<td>20</td>
</tr>
<tr>
<td>Gains (Losses) from fluctuations in Foreign Exchange Rates</td>
<td>(40)</td>
</tr>
<tr>
<td>Total Income Taxes</td>
<td>35</td>
</tr>
<tr>
<td>Dividends declared to Shareholders</td>
<td>10</td>
</tr>
<tr>
<td>Retained Earnings: Adjusted balance at beginning of year</td>
<td>1,000</td>
</tr>
</tbody>
</table>

a. (0.25 point)

P&C-1 page 20.30, Total Underwriting Revenue

b. (0.25 point)

P&C-1 page 20.30, Total Claims and Expenses

c. (0.25 point)

P&C-1 page 20.30, Underwriting Income (Loss)

d. (0.5 point)

P&C-1 page 20.30, Net Income (Loss) for the year

e. (0.5 point)

P&C-1 page 20.40, Retained Earnings: Balance at end of year
48. (1.5 points)

Using the following information from a Canadian insurer's P&C-1, calculate the items specified in parts a. and b. Show all work.

<table>
<thead>
<tr>
<th>P&amp;C-1 Item</th>
<th>Amount ($ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net investment income including recognized gains (losses) on investments in 2003</td>
<td>10</td>
</tr>
<tr>
<td>Net income before tax for 2003</td>
<td>27</td>
</tr>
<tr>
<td>Net income after tax for 2003</td>
<td>18</td>
</tr>
<tr>
<td>Cash, investment income due and accrued, and total investments at the end of 2002</td>
<td>147</td>
</tr>
<tr>
<td>Cash, investment income due and accrued, and total investments at the end of 2003</td>
<td>153</td>
</tr>
<tr>
<td>Equity at the end of 2002</td>
<td>130</td>
</tr>
<tr>
<td>Equity at the end of 2003</td>
<td>140</td>
</tr>
</tbody>
</table>

a. (0.75 point)

P&C-1 page 10.60, Investment Yield for 2003

b. (0.75 point)

P&C-1 page 10.60, Return on Equity for 2003

49. (1.25 points)

A new property and casualty insurance company writes only one policy. The policy has a Self-Insured Retention (SIR) of $100,000. At 11:59 pm on December 31, 2003, the insurance company finds out that it will have to cover a liability claim of $1,000,000 that the policyholder owes to a third party. No funds have yet been paid and no other claims exist for this insurer. Assume that no IBNR is necessary.

a. (0.75 point)

Show the entries on the insurer's P&C-1 balance sheet as at December 31, 2003 in relation to this claim.

b. (0.25 point)

Under what condition is an SIR receivable admissible for statutory test purposes?

c. (0.25 point)

How can the regulator ensure that the condition from part b. above is met?

CONTINUED ON NEXT PAGE
50. (2 points)

The following information is available for a Canadian property and casualty insurer:

<table>
<thead>
<tr>
<th>Paid Losses ($000) during the calendar year (CY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>As of CY</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>1999</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>2001</td>
</tr>
<tr>
<td>2002</td>
</tr>
<tr>
<td>2003</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discounted Claims Liabilities ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>As of CY</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>1999</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>2001</td>
</tr>
<tr>
<td>2002</td>
</tr>
<tr>
<td>2003</td>
</tr>
</tbody>
</table>

Annual investment yield in 2003 is 5%.

Based upon the information above and using the Accident Year Runoff Model, calculate the excess (deficiency) during calendar year 2003 for the December 31, 2002 discounted claims liabilities. Show all work.
51. (1.75 points)

The following is an excerpt from P&C-1 page 60.40 for an insurer:

| P&C-1 page 60.40, Claims and Adjustment Expenses - Run-Off - Total Business ($000) |
|---|---|---|---|
|  | 1999 | 2000 | 2001 | 2002 |
| 1999 Paid during year | 372,000 |   |   |   |
| UCAE*, end of year | 264,000 |   |   |   |
| IBNR, end of year | 134,000 |   |   |   |
| 2000 Paid during year | 146,000 | 333,000 |   |   |
| UCAE, end of year | 173,000 | 275,000 |   |   |
| IBNR, end of year | 60,000 | X |   |   |
| 2001 Paid during year | 70,000 | 160,000 | 362,000 |   |
| UCAE, end of year | 144,000 | 198,000 | 292,000 |   |
| IBNR, end of year | 33,000 | 50,000 | 103,000 |   |
| 2002 Paid during year | 54,000 | 77,000 | 156,000 | 376,000 |
| UCAE, end of year | 99,000 | 148,000 | 217,000 | 310,000 |
| IBNR, end of year | 10,000 | 22,000 | 41,000 | 129,000 |

* UCAE: Unpaid Claims & Adjustment Expenses (excluding IBNR)

Accident year 2000's Excess (Deficiency) ratio was -10.0% as at December 31, 2002.

Using the above information, calculate accident year 2000's IBNR as at December 31, 2000. Show all work.
52. (1 point)

The following information is available for a Canadian property and casualty insurer:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium ceded to reinsurer</td>
<td>$200,000</td>
</tr>
<tr>
<td>Unearned premium ceded to reinsurer</td>
<td>160,000</td>
</tr>
<tr>
<td>Claims incurred by reinsurer</td>
<td>120,000</td>
</tr>
<tr>
<td>Outstanding losses recoverable from reinsurer</td>
<td>600,000</td>
</tr>
<tr>
<td>Receivable from reinsurer</td>
<td>10,000</td>
</tr>
<tr>
<td>Payable to reinsurer</td>
<td>5,000</td>
</tr>
<tr>
<td>Non-owned deposits held as security</td>
<td>750,000</td>
</tr>
<tr>
<td>Letters of credit held as security</td>
<td>80,000</td>
</tr>
</tbody>
</table>

Using the information above, calculate the Capital Required for reinsurance ceded to unregistered insurers for an insurer’s Minimum Capital Test. Assume that the insurer is only ceding to one unregistered reinsurer. Show all work.

53. (2 points)

a. (1.5 points)

Describe three ways in which the new Minimum Capital Test addresses risks that the previous Minimum Asset Test did not.

b. (0.5 point)

Describe one way in which the treatment of the difference between book value and market value of assets in the Minimum Capital Test can be considered conservative in nature.
54. (1 point)

Based upon the Canadian Insurance Accountants Association, Professional Development Program. The Insurance Accountants’ Information Circular MD-31, “Fair Value of Claims Liabilities.” answer the following:

a. (0.5 point)

Define “fair value” in the context of valuing policy liabilities.

b. (0.5 point)

Compare the fair value basis for valuing policy liabilities to the basis recommended by the Canadian Institute of Actuaries.

55. (1 point)

Based upon the Canadian Institute of Actuaries Consolidated Standards of Practice, answer the following:

a. (0.5 point)

Describe what is meant by the term “quasi-insurer.”

b. (0.5 point)

Identify two examples of a quasi-insurer.
56. (3 points)

The following information is available for a Canadian property and casualty insurer as at December 31, 2003:

<table>
<thead>
<tr>
<th>Accident Year</th>
<th>Paid Loss ($000)</th>
<th>Case Reserve ($000)</th>
<th>Ultimate Loss ($000)</th>
<th>Earned Premium ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>1,800</td>
<td>100</td>
<td>2,000</td>
<td>2,500</td>
</tr>
<tr>
<td>2002</td>
<td>5,000</td>
<td>1,700</td>
<td>8,000</td>
<td>10,000</td>
</tr>
<tr>
<td>2003</td>
<td>2,000</td>
<td>4,000</td>
<td>9,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Total</td>
<td>8,800</td>
<td>5,800</td>
<td>19,000</td>
<td>24,500</td>
</tr>
</tbody>
</table>

Discount Rate 4.0%

Provisions for Adverse Deviation (PfAD):
Interest Rate PfAD 1.0%
Claims Development PfAD 2.5%

Accident Year Payment Pattern:
Percentage Paid at 12 months 20%
Percentage Paid at 24 months 60%
Percentage Paid at 36 months 90%
Percentage Paid at 48 months 100%

Using the information above, calculate the gross unpaid claims liability for accident year 2003 as at December 31, 2003, according to accepted actuarial practice, as defined by the Canadian Institute of Actuaries. Assume that all payments are made in the middle of the year. Show all work.

57. (1 point)

Briefly describe four duties of the audit committee for a Canadian property and casualty insurance company.
58. (2 points)

Given the following information for two monoline insurers, answer parts a. to c.:

<table>
<thead>
<tr>
<th>Information as at December 31, 2003</th>
<th>Company</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Unpaid Claims &amp; Adjustment Expenses</td>
<td>$100,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>PV* (Unpaid Claims &amp; Adjustment Expenses)</td>
<td>80,000</td>
<td>95,000</td>
</tr>
<tr>
<td>PfAD** Development</td>
<td>8,000</td>
<td>4,750</td>
</tr>
<tr>
<td>PfAD** Interest</td>
<td>7,500</td>
<td>2,500</td>
</tr>
</tbody>
</table>

* PV = Present Value
** PfAD = Provision for Adverse Deviation

- Neither company has any reinsurance.
- One company writes only commercial liability coverage; the other company writes only commercial property coverage.
- Both companies are using identical discount rates.
- There have been no major catastrophes that would result in unusual property losses.
- Courts have recently been tending towards large punitive damage awards against deep-pocket defendants in cases of negligence.

a. (0.5 point)

Show the unpaid claims and adjustment expenses carried on the P&C-1 balance sheet for each company. Show all work.

b. (0.25 point)

Is the discount rate underlying the answer in part a. above likely to be a market rate? Explain your answer.

c. (1.25 points)

Which company is more likely to be the commercial liability insurer? Provide two distinct reasons for your answer.

CONTINUED ON NEXT PAGE
59. (0.75 point)


60. (1 point)

Actuaries are required to report that the items they value are fairly represented in the financial statements. There may, however, be unusual situations in which disclosure in the financial statements is required to enhance the user’s understanding of the insurer’s financial position. Provide four examples of such situations.

61. (2.5 points)

Based upon the Insurance Companies Act in Canada, answer the following:

a. (1 point)

Describe four ways in which the Appointed Actuary of a company can cease to hold office.

b. (1 point)

When the Appointed Actuary ceases to hold office, what are the responsibilities of the company and what are the responsibilities of the actuary?

c. (0.5 point)

What is the new actuary required to do before accepting an appointment to replace an actuary who resigned or had their appointment revoked?
62. (2 points)

A ceding company, CC, purchases a reinsurance contract from a reinsurance company, RC.

RC agrees to indemnify 100% of the losses of CC’s aggregate losses between $1,500,000 and $2,000,000 for calendar year 2004. CC pays $480,000 for this contract on January 1, 2004. RC agrees to indemnify CC on December 31, 2004 for any amount owed on the contract.

CC’s history of losses is detailed below:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Aggregate Incurred Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>1999</td>
<td>$2,300,000</td>
</tr>
<tr>
<td>2000</td>
<td>$2,800,000</td>
</tr>
<tr>
<td>2001</td>
<td>$2,100,000</td>
</tr>
<tr>
<td>2002</td>
<td>$2,700,000</td>
</tr>
</tbody>
</table>

No significant changes occurred in CC’s book of business from 1998 to 2003, nor are any changes anticipated for 2004.

Will CC be able to account for the expense of this contract as reinsurance? Explain and justify your answer.

CONTINUED ON NEXT PAGE
63. (2 points)

a. (1.25 points)

A federally incorporated insurance company in Canada must select an actuary to peer review its Appointed Actuary’s Report. The company has narrowed down the choice to the five candidates listed in the table below. The company’s current Appointed Actuary works for a consulting firm. Briefly comment on each candidate’s suitability for the peer review role and any restrictions that may arise because of his or her selection.

<table>
<thead>
<tr>
<th>Actuary</th>
<th>Information Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>Was Appointed Actuary for the company two years ago and is therefore very familiar with the operations. Currently works as an independent consultant.</td>
</tr>
<tr>
<td>BB</td>
<td>Was never an Appointed Actuary for the company but worked for it up until four years ago and as such is familiar with its operations. Currently works for a consulting firm that is not associated with the Appointed Actuary’s consulting firm.</td>
</tr>
<tr>
<td>CC</td>
<td>Has never done work for the company but is an employee of the company’s audit firm, which is not associated with the Appointed Actuary’s consulting firm.</td>
</tr>
<tr>
<td>DD</td>
<td>Has never done work for the company but is an employee of the same consulting firm as the company’s Appointed Actuary.</td>
</tr>
<tr>
<td>EE</td>
<td>Has never done work for the company but is a highly regarded consulting actuary in Chicago, which is not affiliated with the Appointed Actuary’s consulting firm.</td>
</tr>
</tbody>
</table>

b. (0.25 point)

How often should the valuation of policy liabilities and the Report of the Actuary be peer reviewed?

c. (0.5 point)

What parties should receive a copy of the peer review report?
<table>
<thead>
<tr>
<th>MC Question #</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>E</td>
</tr>
<tr>
<td>2</td>
<td>A</td>
</tr>
<tr>
<td>3</td>
<td>D</td>
</tr>
<tr>
<td>4</td>
<td>E</td>
</tr>
<tr>
<td>5</td>
<td>C</td>
</tr>
<tr>
<td>6</td>
<td>B</td>
</tr>
<tr>
<td>7</td>
<td>A</td>
</tr>
<tr>
<td>8</td>
<td>D</td>
</tr>
<tr>
<td>9</td>
<td>A</td>
</tr>
<tr>
<td>10</td>
<td>E</td>
</tr>
<tr>
<td>11</td>
<td>C</td>
</tr>
<tr>
<td>12</td>
<td>C</td>
</tr>
<tr>
<td>13</td>
<td>C</td>
</tr>
<tr>
<td>14</td>
<td>D</td>
</tr>
<tr>
<td>15</td>
<td>B</td>
</tr>
<tr>
<td>16</td>
<td>A</td>
</tr>
<tr>
<td>17</td>
<td>E</td>
</tr>
</tbody>
</table>
EXAM 7C

QUESTION # 18

Under **Contact theory**, implied warranties between the buyer and seller exist. It renders a seller strictly liable for defective products, in the presence of a contract, which means that negligence need not be proven (form of strict liability).

Under **tort theory**, a manufacturer has a duty to care for the consumer, since there is no privity of contract between the manufacturer and consumer. A breach of this duty (established through tort principles) by the manufacturer may result in the manufacturer being liable to the consumer for a personal injury caused by a defective product.
EXAM 7C

QUESTION # 19

(A.) Question: Would the insured benefit from the continuing existence of the thing insured or be “damaged” by its destruction?

(B.) For indemnity insurance, insurable interest must exist at the time of the loss.

(C.) Without insurable interest, the claim fails (but contract is not invalidated)
EXAM 7C

QUESTION # 20

(1.) Estoppel by representation: excuse of a prior default (cash of a late payment).

(2.) Promissory estoppel: excuse in advance for a default (The insurer will accept a late payment because it has already accepted a late one).

(3.) Repudiation: If the insurer has denied to pay the payment by saying the contract is no longer in effect due to the customer breaching a condition prior to the loss, it can not also insist that the claimant continue to comply with the terms of the contract.
EXAM 7C

QUESTION # 21

a) Insured has established he has a cause of action but not established that he has right to compensatory damages. Situation → Recovery barred by plaintiff’s conduct.

b) Damages that do not give rise to a right of action but must be attached to another complete claim. → nervous shock
EXAM 7C

QUESTION # 22

a) Special Damages - capable fairly precise mathematical assessment
   - equals pre-trial pecuniary damages

   General Damages - incapable fairly precise mathematical assessment
   - equals all non-pecuniary and post-trial pecuniary damages.

b) Restitutio In Integrum
   - compensation that attempts to place victim in position he/she
     would have occupied if the tort would not have been committed.

   - In fatal accident case, it provides award for comforts that dependant would have
     enjoyed but for the untimely death of the family member.
EXAM 7C

QUESTION # 23

- It was modified such that defendant’s were all jointly and severally liable for economic damages and any sum that any defendant couldn’t pay would be paid by the rest of the defendants in proportion to % of fault or negligence but not to exceed 50% of amount originally awarded against that defendant.
EXAM 7C

QUESTION # 24

a) Utmost good faith
When a settlement is offered to the insurer the insurer must take the interest of the insured into consideration. If the insurer refuses to settle under the policy limit and an award higher than the policy limit is assigned later, the insurer then has to pay the award settlement without regard to the policy limit, unless at least equal consideration has been given to both the interest of the insurer and the interest of the insured.

b) The insured has to disclose all the material relevant information to the insurer, even if the insurer did not ask.

c) (1.) Fortuity: the loss covered under insurance contract must be random. If a loss is certain to occur, such as wear and tear, or if the loss is triggered intentionally the loss cannot be compensated.

(2.) Indemnity: the insurance contract only recovers the losses suffered by the insured. It makes the insured whole, to the conditions that he/she would be in if the accident did not happen. It will not make the insured in a better condition than before.

(3.) Protection of Consumer: Insurance contract law has various rules to protect the consumer. For example, when an ambiguity arises in a contract, the contract is interpreted against the insurer who drafted the contract.
EXAM 7C

QUESTION # 25

a) Real damages: the plaintiff suffered real damages, such as damaged clothing, so real damages are likely to be awarded.

Exemplary damages: exemplary damages are awarded to punish the defendant, to deter and to remove undue profit of the defendant. Since the grocery store manager provided assistance to the client, there is no basis to punish, since there is no undue profit involved, there is no basis to award exemplary damage due to undue profit either. However, exemplary damages could be awarded in deterrence because the bleach had been in the aisle for more than 2 hours without being removed.

Aggravated damages are awarded to compensate the injured feelings of the plaintiff due to outrageous conduct of the defendant. Since the defendant’s conduct is not outrageous, aggravated damages are not likely to be awarded.

b) Non-pecuniary losses: the client has suffered pain and will likely not be able to work for several months due to the pain and suffering, post-trial loss of income, and post-trial medical expenses are non-pecuniary losses.

Pecuniary losses: damage to clothing, pre-trial loss of income and pre-trial medical expense.

c) Client must establish that he would have acquired employment but for the injury. If this is established, then court will estimate earnings (could base upon prior employment of client)
EXAM 7C

QUESTION # 26

- Damages sustained by plaintiff
- Defendant’s conduct must cause the damages
- Defendant’s conduct must breach the standard care
- There must be a legal duty to avoid damages
- Defendant’s conduct must be the proximate cause
- Plaintiff’s conduct should not bar recovery (reduction of scope of duty, classes protected)
EXAM 7C

QUESTION # 27

Precedence was Just v. B.C. where Just was severely injured and daughter was killed when car accident caused by rock falling from cliff [Just sued for negligent maintenance of highway but trial judge and appeal judge denied liability because it was planning and police which was exempt from liability] Supreme Court Justice Corey distinguished between two policy decisions that involved higher levels of govt, budgetary allotments & sex, econ & political factors as being exempt but implementation (providing services) as NOT exempt. He stated that a tort analysis should be done to see if unreasonable and concluded that case should be sent back or new trial to see if gov’t employers met proper status of care. So if it can be shown that if maintenance of highway is implementation (or providing services that is not exempt from liab) or gov’t employees did not provide status of care needed it should go to court.
EXAM 7C

QUESTION # 28

a)
(1.) Legislation
(2.) Regulation
(3.) Guidelines (superintendents)

b)
Guidelines by superintendent

c)
Because: - More flexible
- Less obtrusive (industry prefer to conform to the guidelines rather than being ordered to do so.
- Does not need approval from other parts of government.
EXAM 7C

QUESTION # 29

a) Defense costs should be allocated 50/50

b) Not fair to make allocation based on policy limits since Guardian was plainly at risk since potential judgment greatly exceeded American Home’s limits and a common defense. Costs of providing defense not related to policy limits.

c) Insurer’s of excess policies with much higher limits will be at risk for higher defense costs.

Insurers of excess policies will want to be much more involved in defense since they must pay much of cost.
EXAM 7C

QUESTION # 30

a) It is not a contract of indemnity because the client may not have suffered any damages. In a contract of indemnity you must:
   - prove you have suffered damages
   - quantify the loss

b) A weather derivative is not a valued policy. A valued policy gives a fixed sum of money when the client suffers a loss. Here again, we don’t know if a loss was suffered.
EXAM 7C

QUESTION # 31

a) Favour public Insurance
   Provide efficiencies
   Mandatory nature of insurance should not allow public profits

b) Against public Insurance
   Gov’t cannot always do things more efficiently
   Collateral social purposes can be achieved in other ways

c) Private insurers in BC faced the same problem
   Case of Canadian Indemnity vs AG of BC

   Insurers argued that this was related to trade + commerce and therefore in federal jurisdiction and that the province could not interfere with the status/capacity of federal insurer.

   It was ruled the province did have authority as trade/commerce was interprovincial (not intra-provincial) and that it did not interfere with the status of foreign company as treated all insurers equally.

   Also in Citizens Insurance vs Parsons, it was ruled that the province has a right to regulate business of insurance in the province.

   Legal Council would probably advise not to pursue action against the province as it is within the rights of the province.
EXAM 7C

QUESTION # 32

a) Double recovery occurs when the insured victim receives compensation from the at-fault party (or another source) and is also entitled to a payout from his/her insurance company, without a reduction for the other compensation.

b) Have the insurer be the “second payer” implying that the insurer would only be liable to pay the amount of the insured’s loss in excess of the compensation already received from other sources.

c) If the change were to take place, then rates should become lower to reflect the insurer’s reduced exposure to claim payouts. Also the underwriting rules may be relaxed regarding insurer applicants who have access to such other sources of compensation. This access may also be used to control the rates on an individual insured basis.

d) If the insurer offers lower rates and relaxed underwriting to those with access to other benefits, this may present a discrimination against the less wealthy individuals who may not be able to afford access to these other benefits.
EXAM 7C

QUESTION # 33

a) User fees would create financial barriers to access to medically necessary services. One of the Health Care criteria set forth in the Act was “Accessibility” implying uniform terms for access to these services. User fees would violate this criteria.

b) User fees can comply with the Act if for hospitalization for chronic care and the individual is essentially a permanent resident of the hospital.

c) Participating physicians may not charge for services above that under the provincial plan’s fee schedule. However, non-participating physicians may charge the patient above the fee schedule amount. In this case, the patient would only be reimbursed by the Province for the amount shown in the fee schedule.
EXAM 7C

QUESTION # 34

- The GAA Risk Sharing Plan operates in the following way.
- Insurers that find a risk unacceptable transfer it to the RSP.
- Insurer’s are responsible for underwriting the risk and settling claims.
- 100% of premiums are added to the plan, 100% losses are reimbursed + allowances for u/w expenses and settlement expenses.
- Profits/ losses from the plan are shared based on accumulated premiums in the last year.
- Administrative expenses are shared 30% based on auto voluntary Premiums and 70% based on risk transferred separately for personal and commercial auto.
EXAM 7C

QUESTION # 35

1 C
2 D
3 A
4 B
EXAM 7C

QUESTION # 36

a) Pay-As-You-Go  
→ finance from current general tax revenue of the government. Current taxpayers/ workers pay for the current costs of medical services.

b) With the changing demographics (older population) there is a concern for intergenerational equity. In the future, there will be a smaller proportion of the total population to pay for medical services leading to a higher cost per capita.

c) Old Age Security  
Up to recently, the Canada/Quebec pension plan (now 1/6th pre-funded)
EXAM 7C

QUESTION # 37

a) Create the Automobile Insurance Review Panel, which will review rates, monitor issues, and perform other supervisory practices (shift from “File and Use” to “Prior Approval”)

b) Rate increases are very high and consumers are complaining about affordability. File and Use system did not benefit consumers as intended.

c) File rates at least once every 12 months
   Insurers filing rates >2 times a yr must meet with panel
   If rate increase > 3%, insurer must meet with panel.
EXAM 7C

QUESTION # 38

i.) Greater sense of entitlement to claims payout
ii.) Increasing use of lawyers
iii.) Tendency to focus on pain and suffering
EXAM 7C

QUESTION # 39

a) Measurement uncertainty exists when an amount in the Financial Statement is an estimate.

b) (1.) Show that the amount is variable by giving a range of variability if possible.
   (2.) Disclose the assumptions behind the estimate.
   (3.) Sensitivity of the range to changes in assumptions
EXAM 7C

QUESTION # 40

It seems that the assumption of the loss ratio (LR) at 70% is not realistic. The actuary shouldn’t accept its use in the DCAT base scenario. Should use a realistic LR. The actuary should report any material inconsistency between the plan and the base scenario.
EXAM 7C

QUESTION # 41

a)

<table>
<thead>
<tr>
<th>Net Written Premium =</th>
<th>(Net Risk Ratio) x</th>
<th>Surplus at Year End</th>
</tr>
</thead>
<tbody>
<tr>
<td>NWP 2002 (A) =</td>
<td>270% (100,000) =</td>
<td>270,000</td>
</tr>
<tr>
<td>NWP 2003 (A) =</td>
<td>325% (120,000) =</td>
<td>390,000</td>
</tr>
<tr>
<td>NWP 2002 (B) =</td>
<td>200% (130,000) =</td>
<td>260,000</td>
</tr>
<tr>
<td>NWP 2003 (B) =</td>
<td>216.7% (120,000) =</td>
<td>260,000</td>
</tr>
</tbody>
</table>

Growth (A) = \frac{390,000 - 270,000}{270,000} = 44.4 %

Growth (B) = \frac{260,000 - 260,000}{260,000} = 0 %

Thus A is showing faster premium growth

b) Since the company's Net Risk Ratio is now above 3 to 1, the company is overextending its capital. To mitigate this, it may decrease writings, inject capital, or obtain more reinsurance.

c) Surplus may be decreasing because of adverse underwriting results or unfavorable loss development
EXAM 7C

QUESTION # 42

BALANCE SHEET

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liab</th>
<th></th>
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<tbody>
<tr>
<td>Cash</td>
<td>100</td>
<td>Unpaid</td>
</tr>
<tr>
<td>Bonds</td>
<td>7200</td>
<td>UPR</td>
</tr>
<tr>
<td>Common shares</td>
<td>1000</td>
<td>UPR</td>
</tr>
<tr>
<td>Ceded unpaid</td>
<td>5000</td>
<td>Total</td>
</tr>
<tr>
<td>Ceded UPR</td>
<td>1600</td>
<td></td>
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<tr>
<td>DPAC</td>
<td>800</td>
<td>Equity</td>
</tr>
<tr>
<td>Receivable Agents/Brokers</td>
<td>800</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16500</td>
<td></td>
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</tbody>
</table>

INCOME STATEMENT

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>NEP</td>
<td>4,700</td>
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<tr>
<td>Acq. Exp</td>
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<tr>
<td>Gen. Exp</td>
<td>850</td>
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<tr>
<td>Net claims</td>
<td>3400</td>
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<tr>
<td></td>
<td>5250</td>
</tr>
<tr>
<td>UW Loss</td>
<td>(550)</td>
</tr>
<tr>
<td>Invest Income</td>
<td>400</td>
</tr>
<tr>
<td>Recognized Gain</td>
<td>300</td>
</tr>
<tr>
<td>Expenses</td>
<td>(50)</td>
</tr>
<tr>
<td>Net Invest Income</td>
<td>650</td>
</tr>
<tr>
<td>Net Income</td>
<td>= (550)+650 = 100</td>
</tr>
</tbody>
</table>

RATIOS

(1.) Net Risk Ratio = NWP/equity = 5000/1700 = 2.94
Which is < 3 OK but marginal

(2.) Loss Resv to Surplus = (Net Unpaid + LAE) (1 – Loss Dev Test) / Surplus
= (10800-5000) (1-0) / 1700 = 340% > 250%
not good

(3.) 1 yr Pre tax ROE =2xIncome/ (EQbeg + EQend) = 2x100/((1700-100)+1700)
= 6.0 %
OK by today’s standard

(4.) 1 yr UW Ratio = UW income/ NEP = -550/4700 = - 12%
not good
EXAM 7C

QUESTION # 42  (cont’d)

**RATIOS** (cont’d)

(5.) Test of Receivable = XS Receivables/ surplus = 120/1700 = 7.1%
   7.1% > 0% shows dependence
   Agent/ Broker in XS of 40% surplus= (800-.4*1700) = 120

(6.) Surplus Relief = Ceded WP/Direct WP
   = 5,000/10,000 = 50% which seems high

**MCT CALCULATION**

\[
\text{Cap Available} = \text{Equity} + \text{other} \\
= 1700 + 0 = 1700
\]

\[
\text{Required Capital} = (1) \text{Pol liab margins} + \\
(2) \text{margin for cash bonds shares DPAE & recv} + \\
(3) \text{other} \\
= 859 + 610 + 0 = 1469
\]

(1.) Pol liab margins

\[
\text{NUPR} = 8\% \text{ max (NUPR, } \frac{1}{2} \text{ NWP)} \\
= 8\% \text{ max (2000, 2500)} = 200
\]

\[
\text{Ceded UPR} = 0.5\% \text{ of amount} = .005 \times 1600 = 8
\]

\[
\text{Net Unpaid}=10\% \times \text{Auto liab netOS} = .1 \times (5800 \times .9) = 522 \\
& 5\% \times \text{Auto other netOS} = .05 \times (5800 \times .1) = 29
\]

\[
\text{Ceded unpaid} = 2\% \text{ of value} = .02 \times 5000 = 100
\]

\[
\text{total} = 200+8+522+29 +100= 859
\]

(2.) margin for cash, bonds shares DPAE & recv = 610 (given)

(3.) other: the company does not appear to require any other margins

Therefore MCT ratio = Cap avail / Cap required

\[
= 1700/1469 = 116\%
\]

Below regulatory requirement of 150%

This is not good
CONCLUSIONS

The company’s financial condition is not very good before consideration of changes in the province due to the following:

- the company passed only 2 of the 6 key ratios tested and of the 2 passed, 1 was very close to the limit.
- the company did not meet the regulatory requirement for the MCT
- concerns over the dependence on reinsurance
- concerns over negative UW

After consideration of the changes in the province, the company will be in a much worse position than it is currently in due to the following:

- reduction in loss costs does not look to be as much as premiums reduction that will be mandated according to actuaries
- this will likely put the company in a money losing position so that a bad position will get worse
- the take all comers rule with the exit of a major competitor will put a huge strain on this company
EXAM 7C

QUESTION # 43

a) The financial condition is satisfactory because the insurer meets its policy holders liabilities under all scenarios (surplus is above 0) and the insurer meets regulatory requirement under the base scenario (MCT above 150%).

b) Under reinsurance risk because it fails regulatory requirement (MCT should be above 150%).

c) Increase rates.

d) Increased reinsurance costs due to adjustable features of contracts.

e) Since it would be a threat to capital adequacy to wait until the next DCAT analysis, the actuary should modify the DCAT report to take into account this additional information. He will then do integrated scenarios which includes reinsurer failure and other adverse scenarios.
EXAM 7C

QUESTION # 44

Schedule P:

(i.) Provides detail by line of business (60.40 is all combined)

(ii.) Provides loss triangles with a longer history than in the 60.40 (10 yrs vs 5 yrs)

(iii.) Provides information regarding claim counts (60.40 does not)

(iv.) Provides information on direct/assumed, ceded and net basis (60.40 only on a net basis)
EXAM 7C

QUESTION # 45

Calculate the equity in the UEP

Exp. Losses = 11250 = 25% (15000)
IA = 10% * 75% (15000) = 1125
Maintenance Expenses = 30% (9%) (15000) = 405
Comt. Comm. = 1% (15000) = 150
⇒ EQUP = 15000 – 11250 – 1125 – 405 – 150 = 2070
DPAC before adj. = 15% (15000) = 2250

Because EQUP < DPAC. DPAC will be capped at 2070
EXAM 7C

QUESTION # 46

a)  
Net commissions = [Deferred (beg) – Unearned (beg)]  
   + [Direct + Assumed – ceded paid commissions]  
   - [Deferred (end) - Unearned (end)]  
   = (600 – 500) + (1300 – 400) - (650 – 450)  
   = 800

b)  
Commission Expense = Deferred (beg)  
   + [Direct + Assumed paid commissions]  
   - Deferred (end)  
   = 600 + 1300 - 650  
   = 1250

c)  
Commission Revenue = Unearned (beg)  
   + Ceded paid commissions  
   - Unearned (end)  
   = 500 + 400 – 450  
   = 450

d)  
Acquisition Expenses: Commissions = Net commissions  
   + Contingent commissions  
   - Other non-deferrable  
   = 800 + 250 + 0  
   = 1,050
EXAM 7C

QUESTION # 47

a)
Net Premiums Written 750
+ Decrease (increase) in net unearned premiums -80
+ Service charges +15
685

b)
Net claims and adjustments Expenses 450
+ Commissions +80
+ Taxes +20
+ General expenses +50
605

c)
Underwriting income = 685 – 605
= 80

d)
Underwriting income 80
+ Investment operations – income +300
+ “ – recognized gains (losses) -50
- “ – expenses -20
+ gains (losses) from fluctuations in foreign rates -40
- total income taxes -35
+235

e)
Retained Earnings: beginning of year 1000
+ change in net income +235
- dividends to shareholders -10
1,225
EXAM 7C

QUESTION # 48

a) INV yield = \( \frac{2I}{A + B - I} \)
   
   I = Inv income incl. gain/loss
   A = Beg of year cash inv income + total inv
   B = End of year “ “

   \[ = \frac{2 \times 10}{147 + 153 - 10} = 6.9\% \]

b) ROE = \( \frac{\text{Net income after tax}}{(\text{Equity @ end} + \text{Equity @ beg})/2} \)

   \[ = \frac{18}{(130 + 140)/2} = 13.3\% \]
EXAM 7C

QUESTION # 49

a)  
→ Increase Reserve for Unpaid Claims on 20.20  
  by the $1M less $100,000 = 900,000

→ Include the SIR = $100,000 in Other Liabilities

→ On 20.10, put the SIR of $100,000 into “Other Recoverables”

b)  
The policy holder is solvent and has the proven ability to pay the self-insured Retention

c)  
Regulator may require acceptable collateral be provided by the policyholder to ensure collectibility.
EXAM 7C

QUESTION 50

Excess/ Def. For AX 2002
= Discounted claim liab 2002 + Inv at 5% yield ((42000 + 23000)/2 = 1625)
   - paid 2003 - Discounted 2003

   = 42,000 + 1625 – 21,000 – 23,000 = -375 (deficiency)

Excess/ Def. For AX 2001
21000 + 5% (21,000 + 9,000) – 10,000 – 9000 = 2750
2

Excess/ Def for AX 2000
6000 + 5% (6,000 + 1,000) - 5,000 – 1,000 = 175
2

Excess / Def for AX 1999
6000 + 5% (6000 + 2000) - 3000 – 2000 = 1200
2

→ Total is excess of = 1200 + 175 + 2750 – 375 = 3750
QUESTION # 51

Unpaid claim 2000 @ Dec 2000 = 275,000 + X

Unpaid claim 2000 @ Dec 2002 = 148000 + 22000 = 170000

Paid 2000 in 2001 & 2002 = 160000 + 77000 = 237000

Excess/deficiency = Unpaid @2000 – Paid 01 & 02 – Unpaid @2002
\[ \text{Unpaid @2000} \]

\[ -10\% = \frac{275000 + x - 170000 - 237000}{275000 + X} \]

\[ -27500 - .1X = X - 132000 \]

\[ 1.1X = 104500 \quad \Rightarrow \quad X = 95000 \]
EXAM 7C

Question # 52

Cap required
+UEPR (reins) = 160,000
+O/S losses (reins) = 600,000
+10% margin on UEPR and O/S losses = (.1) (160,000 + 600,000) = 76,000
+ rec from reins = 10,000
- non owned deposit = 750,000
-LOC =80,000

= 160,000 + 600,000 + 76,000 + 10,000 – 5,000 – 750,000 – 80,000
= 11,000

However
LOC is in excess of 10% margin on UEPR and OS (80,000 – 76,000 = 4,000) by 4,000

so cap required is
= 11,000 + 4,000
= 15,000
EXAM 7C

QUESTION # 53

a)  
(i.) It addresses off – balance sheet exposure by including it in with capital required.

(ii.) It addresses investment risk.

(iii.) It differentiates between liabilities of long-tail and short-tail lines by increasing the margin applied to long-tail liabilities.

b)  
For real estate in the mark to market adjustment: no adjustment is made when market value exceeds book value, but 100x of the excess of book over market would be included in the adjustment.
a) Consideration agreed at arm’s length between people under no compulsion to act.

b) Same procedure for discounting except the discount rate is based on market rates on assets that match the claims liab (fair value) compared to a rate based in the supporting assets book values (CIA).
EXAM 7C

QUESTION # 55

a) An entity that assumes risk similar to that of an insurer but without the legal form of an insurer.

b) (i.) A provider of extended warranties.
(ii.) A self-funding mechanism, such as the facility association.
EXAM 7C

QUESTION # 56

→ Paid in 2004 = \( \frac{60\% - 20\%}{100\% - 20\%} \times (\text{ULT loss} - \text{Paid loss}) \)

\[ = .50 \times (9000 - 2000) \]
\[ = .50 \times 7000 \]
\[ = 3500 \]

Paid in 2005 = \( \frac{90\% - 60\%}{100\% - 20\%} \times (7000) \)

\[ = 2625 \]

Paid in 2006 = \( \frac{100\% - 90\%}{100\% - 20\%} \times (7000) \)

\[ = 875 \]

→ Discount Rate w/o Int. Rate PFAD = 4.0%

→ PV (unpaid) = \( \frac{3500}{(1.04)^{0.50}} + \frac{2625}{(1.04)^{1.5}} + \frac{875}{(1.04)^{2.5}} = 6700 \)

→ Discount Rate w/ Int. Rate PFAD = 4.0\% - 1.0\% = 3.0%

→ PV (unpaid + Int Rate PFAD) = \( \frac{3500}{(1.03)^{0.50}} + \frac{2625}{(1.03)^{1.5}} + \frac{875}{(1.03)^{2.5}} = 6772 \)

→ Dev. PFAD = 6700 \( (2.5\%) = 167.5 \)

→ No Reinsurance PFAD since gross

→ Act Liab = (PV + Int. Rate PFAD) + (Dev PFAD)

\[ = 6772.5 + 167.5 \]
\[ = 6940 \]
EXAM 7C

QUESTION # 57

The audit committee needs to review the financial statements before they are seen by the Board of Directors

The audit committee must meet with the appointed actuary at least once a year

The audit committee must meet with the external auditor at least once a year

The audit committee shall review such returns of the company as the superintendent may indicate.
EXAM 7C

QUESTION # 58

a)

<table>
<thead>
<tr>
<th></th>
<th>A:</th>
<th>B:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV claims</td>
<td>80,000</td>
<td>95,000</td>
</tr>
<tr>
<td>+ PFAD Dev.</td>
<td>8,000</td>
<td>4,750</td>
</tr>
<tr>
<td>+ PFAD Int.</td>
<td>7,500</td>
<td>2,500</td>
</tr>
<tr>
<td></td>
<td>95,000</td>
<td>102,250</td>
</tr>
<tr>
<td>Amt. Carried</td>
<td>95,000</td>
<td>102,250</td>
</tr>
</tbody>
</table>

b) No. the rate should be the rate of the underlying assets which is Book Value.

c) “A” is more likely to be the commercial liability insurer.
   (1.) The present value is less which is to be expected for long tailed lines as time to settlement is greater.
   (2.) The PFADS are higher which would incorporate interest rates (as projecting farther into the future) for long tailed lines.
EXAM 7C

QUESTION # 59

(1.) Increase the education of both the appointed actuary and his/her reviewer.

(2.) Increase the confidence of the public and the users of the actuary’s work.

(3.) Narrow the range of practice by appointed actuaries.
Inconsistency among accounting periods.

Differences in current insurer’s practices and those assumed in financial statement.

Capital appropriated on actuary’s advice.

Subsequent events.
EXAM 7C

QUESTION # 61

a)
Death
Ceases to be an actuary (FCIA)
Appointment revoked
Resign

b)
Actuary: must send a written statement to the superintendent + board of directors outlining the reasons why he resigned or in his opinion why the appointment was revoked.

Company: must notify the superintendent of vacancy + fill the vacancy.

c)
Must request and obtain the previous actuary’s written Statement or accept if not received within 15 days.
The timing of RC’s indemnification to CC does not depend on the timing of CC’s payment to the policyholders. Thus no timing risk is transferred.

Historically, aggregate losses have exceeded $2M, in which case the amount of indemnification to CC would be $500,000. The profit made in this case for RC would be $480,000 - $500,000 = $-20,000. This indicates that there is not a reasonable possibility that RC will experience a significant loss, since a $20,000 loss would not be considered significant. By same argument it appears that the amounts of the cash flows are relatively certain and thus there is not significant underwriting risk.

→ Since there is no significant timing or underwriting risk (= “insurance risk”) transferred and no reasonable possibility of a significant loss, this contract should not be accounted for as reinsurance.
EXAM 7C

QUESTION # 63

a)

AA = OSFI does not accept appointment because the actuary cannot have been the appointed actuary in last 3 years.

BB = He can take the appointment, no restrictions

CC = He can take the appointment as long as the peer review report is on a pre-release basis and he signs a separate agreement from the auditor.

DD = He cannot take the appointment because in the same firm as the current appointed actuary.

EE : He must be a FCIA. He can do it if he is FCIA.

b)

A full review should be done over a 3-year period.

c)

Audit Committee, and OSFI should

↓

(chief agent if a foreign insurer!)