

Exam 6US



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Exam 6-United States

Regulation and Financial Reporting (Nation Specific)

October 27, 2014

4 HOURS

INSTRUCTIONS TO CANDIDATES

1. This 81.75 point examination consists of 25 problem and essay questions.
2. For the problem and essay questions, the number of points for each full question and 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 or correction fluid/tape.
 - Write your Candidate ID number and the examination number, 6US, 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 only on the front lined side of the paper – DO NOT WRITE ON THE BACK OF THE PAPER. Be careful to give the number of the question you are answering on each sheet. If your response cannot be confined to one page, please use additional sheets of paper as necessary. Clearly mark the question number on each page of the response in addition to using a label such as “Page 1 of 2” on the first sheet of paper and then “Page 2 of 2” on the second sheet of paper.
 - The answer should be concise and confined to the question as posed. When a specified number of items are requested, do not offer more items than requested. For example, if you are requested to provide 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.
3. Do all problems until you reach the last page of the examination where "END OF EXAMINATION" is marked.

All questions should be answered according to the United States statutory accounting practices and principles, unless specifically instructed otherwise. SAP refers to Statutory Accounting Principles, and GAAP refers to Generally Accepted Accounting Principles. NAIC refers to the National Association of Insurance Commissioners.

CONTINUE TO NEXT PAGE OF INSTRUCTIONS

4. Prior to the start of the exam you will have a **fifteen-minute reading period** in which you can silently read the questions and check the exam booklet for missing or defective pages. A chart indicating the point value for each question is attached to the back of the examination. Writing will NOT be permitted during this time and you will not be permitted to hold pens or pencils. You will also not be allowed to use calculators. The supervisor has additional exams for those candidates who have defective exam booklets.
5. 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.
6. Candidates must remain in the examination center until two hours after the start of the examination. The examination starts after the reading period is complete. 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.
7. At the end of the examination, place all answer sheets in the Examination Envelope. Please insert your answer sheets in your envelope in question number order. Insert a numbered page for each question, even if you have not attempted to answer that question. Nothing written in the examination booklet will be graded. Only the answer sheets will be graded. Also place any included reference materials in the Examination Envelope. BEFORE YOU TURN THE EXAMINATION ENVELOPE IN TO THE SUPERVISOR, BE SURE TO SIGN IT IN THE SPACE PROVIDED ABOVE THE CUT-OUT WINDOW.
8. 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.

Candidates may obtain a copy of the examination from the CAS Web Site.

All extra answer sheets, scrap paper, etc. must be returned to the supervisor for disposal.
9. 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 and the Canadian Institute of Actuaries 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.
10. The exam survey is available on the CAS Web Site in the "Admissions/Exams" section. Please submit your survey by November 17, 2014.

END OF INSTRUCTIONS

EXAM 6 – UNITED STATES, FALL 2014

1. (2.5 points)

a. (0.5 point)

Briefly describe two consequences of the McCarran-Ferguson Act.

b. (0.5 point)

Briefly describe two key questions related to insurance regulation that were not addressed by Congress in the McCarran-Ferguson Act.

c. (0.5 point)

Briefly describe two NAIC responses to the McCarran-Ferguson Act.

d. (1 point)

For each of the following scenarios, explain whether the action would be legal in the insurance regulatory environment in 2014.

- A large number of independent insurance companies pool data on loss experience and use it to determine the loss costs underlying the rates for all of these companies.
- The same group of companies threatens to cancel contracts with agents who do business with any insurance company that does not use these loss costs.

2. (3.75 points)

a. (0.25 point)

Briefly describe the cost-based condition for insurance rates to be considered equitable.

b. (0.5 point)

According to McCarty, briefly describe two conditions for insurance rates to be considered equitable to consumers.

c. (1 point)

An auto insurance company finds a significant correlation between a driver's claim frequency and the number of text messages sent. The insurance company proposes segmenting groups into low and high risk categories based on texting frequency.

Describe whether the insurer's use of texting frequency as a rating variable would be equitable in each of the following contexts:

- Within a risk classification system
- From the perspective of an individual consumer

d. (0.5 point)

In a scenario where all auto insurance companies except Insurer X use texting frequency as a rating variable, discuss a concern that a regulator might have regarding Insurer X's financial stability.

e. (1 point)

Based on the concern discussed in part d. above, briefly describe two IRIS ratios that the regulator should examine and the trend that the regulator should look for in each ratio to validate the concern.

f. (0.5 point)

Assuming that Insurer X does not introduce texting frequency as a variable, describe one action that Insurer X could take to remain competitive.

3. (3 points)

An efficient regulatory system should meet the following criteria:

- It should have benefits that exceed its costs.
- It should respond to changes in the economy.

a. (0.5 point)

Briefly describe one provision of the Gramm-Leach-Bliley Act and how it meets one of the above criteria.

b. (0.5 point)

Briefly describe one provision of the Dodd-Frank Act and how it meets one of the above criteria.

c. (1 point)

Describe two specific examples of duplication of effort in solvency regulation.

d. (1 point)

Describe one challenge in solvency regulation and describe one possible solution.

4. (2.75 points)

a. (0.5 point)

Describe the purpose of risk retention groups (RRGs).

b. (1.25 points)

Identify which of the following entities is most likely to purchase insurance from an RRG and which is most likely to purchase from a traditional insurance company. Describe the rationale for each selection.

- A small business
- A large corporation

c. (1 point)

Describe two arguments that support the following statement: Financial ratings for RRGs are beneficial.

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5. (3.5 points)

An insurer writes personal lines business in multiple states. Its underwriting guidelines indicate that it does not insure homes worth less than \$100,000. It will only insure personal property for renters if they also buy their auto insurance from the company.

The following excerpts have been provided from the insurer’s 2013 Annual Statement:

| | Current Year Net Admitted Assets (000s) | Prior Year Net Admitted Assets (000s) |
|---|---|---|
| Bonds | \$30,000 | \$55,000 |
| Common stocks | 40,000 | 15,000 |
| Real estate held for production of income | 12,000 | 3,000 |
| Cash and cash equivalents | 20,000 | 5,000 |
| TOTALS | \$102,000 | \$78,000 |

| | | |
|-----------------------|-----------|-----------|
| Gross written premium | \$ 45,000 | \$ 32,000 |
| Net written premium | \$ 40,000 | \$ 27,000 |

a. (0.5 point)

Briefly describe two concerns about the company’s underwriting guidelines that a regulator might raise during a market conduct exam.

b. (1 point)

Evaluate the financial health of the company by identifying and briefly describing two areas that a regulator might investigate.

c. (1 point)

Given the findings in parts a. and b. above, briefly describe four actions that a regulator may take.

d. (1 point)

Fully describe how the NAIC might also be involved in this investigation. Include a description of the NAIC’s duties and interaction with the domestic state regulator.

6. (4.75 points)

A chemical used in manufacturing office desks has been found to cause a life-threatening disease.

a. (1.5 points)

For each of the following, describe whether an injured office worker would benefit more from the claim being filed under a workers' compensation policy instead of under a products liability policy:

- The length of time between claim reporting and payment
- The likelihood of payment
- The amount of payment

b. (2 points)

A law is passed barring injured office workers from forming class action lawsuits against the desk manufacturers. Describe how this law might affect each of the following:

- Number of claimants
- Average defense costs
- Average indemnity claim amounts
- Total claim dollars paid to all claimants

c. (0.25 point)

Briefly describe medical criteria statutes.

d. (1 point)

Assume that medical criteria statutes apply to the situation described above. Briefly describe and justify the impact that medical criteria statutes would have on each of the following:

- Number of office workers filing claims
- Average claim amounts awarded to office workers

7. (2.5 points)

a. (0.5 point)

Provide two brief justifications for socialized insurance costs.

b. (0.5 point)

Briefly describe two typical program features which make socialized insurance more feasible.

c. (0.5 point)

A regulatory jurisdiction attempts to socialize insurance costs by instituting price constraints in a private, voluntary market. Briefly describe two potential costs an insurer could face if it plans on exiting this market.

d. (1 point)

Describe two ways in which an insurer may be able to grow its book of business in a state with strict rate regulations.

8. (3.25 points)

In 2014, a certified terrorism event occurred which caused \$50 billion of insurance industry losses.

An insurance company experienced \$200 million of losses due to this event before any recoveries from the federal government.

The following table provides 2013 earned premium for this insurance company:

| Line of Business | Earned Premium (\$000 omitted) | |
|-----------------------|--------------------------------|---------|
| | Direct | Assumed |
| Commercial Property | 50,000 | 5,000 |
| Homeowners | 25,000 | 1,000 |
| Personal Auto | 25,000 | 1,000 |
| Workers' Compensation | 100,000 | 0 |

a. (2.25 points)

Determine the amount of the \$200 million terrorism loss that is paid by the insurance company and the amount that is paid by the federal government under the Terrorism Risk Insurance Program Reauthorization Act of 2007.

b. (0.5 point)

Identify two criteria necessary for an event to be certified as an act of terrorism under the Terrorism Risk Insurance Program Reauthorization Act of 2007.

c. (0.5 point)

Briefly describe two characteristics of terrorism risk that may make it uninsurable by the private insurance market.

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9. (2.25 points)

a. (1 point)

Describe the extent to which the following programs are fully funded:

- Social Security
- National Flood Insurance Program (NFIP)

b. (0.75 point)

Briefly describe three reasons why the level of funding for the Social Security program may be acceptable.

c. (0.5 point)

Briefly describe two reasons why the level of funding for the NFIP may not be acceptable.

10. (2.5 points)

A 70-year-old who has never had a job and has never been married is issued a federally-backed mortgage to purchase a vacant property situated on an inland floodplain. The property remains vacant after it is purchased. Explain whether this individual would be eligible, ineligible, or required to obtain coverage under each of the following government insurance programs:

- FAIR Plan
- NFIP
- Medicare
- Social Security
- Windstorm Plan

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11. (2.5 points)

a. (0.5 point)

For each of the following stakeholders, briefly describe one need that is not met by the data shown in the Statement of Income:

- Regulators
- Company management

b. (0.5 point)

Briefly describe two differences between the expense information shown in the Insurance Expense Exhibit (IEE) and the Underwriting and Investment Exhibit.

c. (0.5 point)

Provide one argument for and one argument against excluding unrealized capital gains and losses from the total investment gain allocated in the IEE.

d. (1 point)

Describe two differences between the NAIC's prescribed method of allocating surplus in the IEE and methods of allocating surplus that might be used for ratemaking purposes.

12. (6 points)

The following excerpts are from an insurance company's 2013 Annual Statement (all figures are in thousands of dollars):

| | Current Year | Prior Year |
|--|--------------|------------|
| Direct written premiums | 300,000 | |
| Direct unearned premiums | 186,000 | 31,200 |
| Direct losses paid | 64,000 | |
| Direct losses unpaid | 89,000 | 59,600 |
| Direct LAE paid | 17,500 | |
| Direct LAE unpaid | 32,200 | 11,100 |
| Other underwriting expenses paid | 35,400 | |
| Other underwriting expenses unpaid | 1,500 | 600 |
| Investment expenses incurred | 10 | |
| Total gross investment income earned during the year | 4,270 | |
| Net realized capital gain (loss) | 3,400 | 1,830 |
| Change in unrealized capital gain (loss) | -4,600 | 7,900 |
| Nonadmitted assets | 900 | 700 |
| Surplus as regards policyholders | | 80,400 |

a. (3 points)

Assume the company wrote annual policy terms and neither assumed nor ceded any business. Calculate the company's policyholders' surplus as of December 31, 2013. Ignore federal income taxes.

b. (2.25 points)

Assume instead the company had entered into a quota share reinsurance agreement with an unaffiliated company on January 1, 2013. The contract applied to all business written during 2013 and had a fixed ceding commission of 32%.

The company expected its policyholders' surplus as of December 31, 2012 to grow in 2013 by the amount of ceding commission, and the quota share percentage was selected so that the company's expected 2013 IRIS ratio 2 would be reduced to 300%.

Calculate the company's expected 2013 IRIS ratio 4 (surplus aid to policyholders' surplus) and discuss how a regulator might respond to the result.

c. (0.75 point)

Assuming the company had purchased the reinsurance contract described in part b. above, identify and describe one disclosure that would have been required in the company's 2013 Notes to the Financial Statements.

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13. (4 points)

The following excerpts are from an insurance company's 2012 Schedule P (all figures are in thousands of dollars):

Schedule P - Part 2J Auto Physical Damage
Incurred Loss & DCC

| Year | 2010 | 2011 | 2012 |
|-------|------|------|------|
| Prior | 350 | 650 | 655 |
| 2011 | XXX | 800 | 900 |
| 2012 | XXX | XXX | 710 |

Schedule P - Part 3J Auto Physical Damage
Cumulative Paid Loss & DCC

| Year | 2010 | 2011 | 2012 |
|-------|------|------|------|
| Prior | 0 | 500 | 555 |
| 2011 | XXX | 100 | 700 |
| 2012 | XXX | XXX | 75 |

Additionally, the following Auto Physical Damage paid and unpaid information is given for calendar year 2013 (all figures are in thousands of dollars):

| Year | Paid Loss & DCC in 2013 | Unpaid Loss & DCC at 12/31/13 |
|-------|----------------------------|----------------------------------|
| Prior | 20 | 15 |
| 2011 | 240 | 25 |
| 2012 | 435 | 215 |
| 2013 | 95 | 725 |

Create the Schedule P - Part 2J - Auto Physical Damage table that would appear in the company's 2013 Annual Statement.

14. (2 points)

An insurance company that writes \$100 million of premium a year experiences two significant events while preparing its 2013 financial statements:

- i. A large claim was initially reported on October 30, 2013. Information received on January 5, 2014 called for a \$5 million increase in this claim's reserves.
- ii. A hurricane made landfall on January 8, 2014, causing catastrophic property damage with an estimated net impact of \$30 million to the company.

a. (1 point)

Briefly describe the two types of subsequent events discussed in financial statements, and for each event described above, identify which type of subsequent event it is.

b. (1 point)

For each event described above, briefly describe whether the financial statements should be updated to reflect the event and whether a disclosure is required.

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15. (6 points)

An insurance company has prospective reinsurance with one authorized company. Using the company's following year-end balance information, calculate the company's year-end statutory policyholders' surplus. All figures are in thousands of dollars.

| | | | |
|--|--------|---|--------|
| Agents' balances less than 90 days past due | 1,000 | Agents' balances more than 90 days past due | 200 |
| Bonds (NAIC 1 & 2), amortized cost | 45,000 | Bonds (NAIC 1 & 2), fair value | 40,000 |
| Bonds (NAIC 3 and above), amortized cost | 15,000 | Bonds (NAIC 3 and above), fair value | 10,000 |
| Cash and cash equivalents | 500 | Deferred acquisition costs | 1,500 |
| Goodwill on acquisitions occurring 10+ years ago | 3,000 | High-deductible unpaid losses underneath the deductible | 5,000 |
| Direct & assumed unearned premium | 12,000 | Ceded unearned premium | 2,000 |
| Admitted Deferred tax asset | 1,900 | Deferred tax liability | 650 |

| | | | |
|--|--------|--|-------|
| Schedule P, Part 1 direct & assumed loss payments | 90,000 | Schedule P, Part 1 direct & assumed DCC payments | 8,000 |
| Schedule P, Part 1 direct & assumed losses unpaid: case basis | 19,000 | Schedule P, Part 1 direct & assumed DCC unpaid: case basis | 3,500 |
| Schedule P, Part 1 direct & assumed losses unpaid: bulk & IBNR | 20,000 | Schedule P, Part 1 direct & assumed DCC unpaid: bulk & IBNR | 4,000 |
| Schedule P, Part 1 direct & assumed adjusting & other payments | 11,000 | Schedule P, Part 1 direct & assumed adjusting & other unpaid | 2,500 |

Additional year-end information for the authorized reinsurance contract:

| Reinsurance recoverable on paid loss & LAE | | |
|--|----------------|-------|
| Less than 90 days past due | Not in dispute | 3,700 |
| | In dispute | 150 |
| Greater than 90 days past due | Not in dispute | 250 |
| | In dispute | 50 |
| Amounts received Prior 90 days | | 0 |

| | |
|--|-------|
| Reinsurance recoverable on unpaid loss | 7,500 |
| Reinsurance recoverable on unpaid LAE | 0 |
| Funds held by company under reinsurance treaties | 180 |
| Letters of credit | 0 |
| Ceded balances payable | 0 |

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16. (2.75 points)

Given the following information for a monoline insurance company (all figures are in thousands of dollars):

Excerpts from 2010 Annual Statement, Schedule P – Part 1

| Accident Year | Total Net Paid Losses & LAE | Total Net Losses & LAE Incurred |
|---------------|-----------------------------|---------------------------------|
| 2001 | 3,645 | 3,645 |
| 2002 | 4,050 | 4,050 |
| 2003 | 4,320 | 4,320 |
| 2004 | 4,590 | 4,590 |
| 2005 | 4,725 | 4,725 |
| 2006 | 4,995 | 5,258 |
| 2007 | 5,130 | 5,700 |
| 2008 | 4,860 | 6,075 |
| 2009 | 4,455 | 6,854 |
| 2010 | 2,700 | 6,750 |

- For tax purposes, assume that the discount rate for accident year 2012 is 7%. Ignore investment income and the effects of the Alternative Minimum Income Tax.
- The U.S. Treasury has promulgated a loss reserve discount factor pertaining to the company's line of business for accident year 2012 (in companies' 2012 Annual Statements) of 0.85.
- The company's payment patterns are expected to remain stable for the next five years.

Justify whether the company should elect to discount loss reserves using the company's own Schedule P - Part 1 payment pattern.

17. (2.25 points)

The following information is from an insurance company’s 2013 Annual Statement (all figures are in millions of dollars):

Liabilities, Surplus and Other Funds

| | |
|------------------------|----|
| Policyholders’ Surplus | 80 |
|------------------------|----|

Underwriting and Investment Exhibit

| | |
|--------------------------------------|-----|
| Direct Written Premium | 700 |
| Net Written Premium | 200 |
| Reinsurance Assumed – Affiliates | 15 |
| Reinsurance Assumed - Non-Affiliates | 18 |

| | |
|--------------------------------|-----|
| Prior Year Net Written Premium | 350 |
|--------------------------------|-----|

a. (0.75 point)

Calculate IRIS ratios 1, 2, and 3 using the information above.

b. (0.5 point)

A consideration for analyzing IRIS ratio 1 is to review with IRIS ratio 2 to make sure the disparity between the ratios are not too large. Briefly describe two other considerations.

c. (0.5 point)

A consideration for analyzing IRIS ratio 2 is to look at IRIS ratio 2 on a consolidated basis if the insurance company is an affiliate. Briefly describe two other considerations.

d. (0.5 point)

A consideration for analyzing IRIS ratio 3 is to look at IRIS ratio 9 to determine whether the insurer’s assets are properly valued and sufficient liquidity is available to meet cash demands. Briefly describe two other considerations.

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18. (4.5 points)

Given the following data:

| | | Line of Business | | |
|-----|---|---------------------------------|----------------------|--------------------------|
| | | Commercial Auto Liability | General Liability | Workers' Compensation |
| (1) | Industry average loss & LAE ratio for past 10 years | | | 0.982 |
| (2) | Company average loss & LAE ratio for past 10 years | | | 1.043 |
| (3) | Industry loss & LAE ratio | | | 1.018 |
| (4) | Adjustment for investment income | | | 0.817 |
| (5) | Company current year net written premium (\$000s) | 15,000 | 6,900 | 8,200 |
| (6) | Company underwriting expense ratio | | | 0.335 |
| (7) | Portion of reserves on retro-rated plans | | | |
| | (a) % direct loss sensitive | | | 11.4% |
| | (b) % assumed loss sensitive | | | 3.5% |
| | Net Written Premium RBC after discount (\$000s) | 570,000 | 84,380 | |

| | |
|---------------------------------|-------------|
| R ₀ | \$2,400,000 |
| R ₁ | \$1,300,000 |
| R ₂ | \$2,900,000 |
| R ₃ | \$1,800,000 |
| R ₄ | \$7,300,000 |
| Excessive Premium Growth charge | \$20,462 |
| Policyholders' Surplus | \$5,300,000 |

R₃ and R₄ have been adjusted for reinsurance recoverables.

a. (3.5 points)

Calculate RBC.

b. (0.5 point)

Briefly describe two ways reserving practices could be modified to move a company from Regulatory Action Level to Company Action Level.

c. (0.5 point)

Describe why RBC is not a fail-safe test of financial impairment.

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19. (3.25 points)

The following information is available for an insurance company (all figures are in millions of dollars):

| | <u>As of December 31, 2013</u> |
|--|--------------------------------|
| Statutory policyholders' surplus | 122 |
| Statutory gross loss and LAE reserves | 46 |
| Statutory ceded loss and LAE reserves | 22 |
| Statutory gross unearned premium reserve | 57 |
| Statutory ceded unearned premium reserve | 30 |
| Provision for reinsurance | 1.3 |
| Deferred acquisition cost asset | 18 |

a. (1.25 points)

Calculate the company's 2013 surplus on a GAAP basis.

b. (2 points)

Briefly describe how each of the following items differs in its treatment under GAAP and SAP.

- Structured settlements
- Discounting of loss reserves
- Retroactive reinsurance
- Deferred tax assets

20. (3 points)

Consider the following situations:

- Situation 1: The actuary has determined a reasonable range of reserves of \$42 million to \$57 million, with a point estimate of \$52 million. Company management booked reserves of \$43 million.
- Situation 2: The actuary was appointed in November 2013. The insurance company experienced a major fire in its datacenter in January 2014. The company has not provided the actuary with the requested loss data by the end of February 2014.
- Situation 3: An insurance company writes both property and workers compensation insurance. The actuary has determined a reasonable range of reserves of \$140 million to \$175 million, with a point estimate of \$160 million, for the company's property exposures. The actuary did not include workers compensation in the scope of his work as it is outside his area of expertise. Company management booked total reserves of \$200 million, of which \$160 million is attributable to property coverage.
- Situation 4: The actuary has determined a reasonable range of reserves of \$255 million to \$315 million, with a point estimate of \$295 million. Company management booked reserves of \$325 million.

a. (1 point)

Identify the type of opinion the Appointed Actuary should issue in each situation.

b. (1 point)

Briefly describe the rationale for issuing each type of opinion identified in part a. above.

c. (1 point)

Briefly describe any necessary disclosures the actuary must make related to the type of opinion identified in part a. above.

21. (2.5 points)

The following was included in the 2013 Statement of Actuarial Opinion for an insurance company:

“OPINION

In my opinion, the reserves carried in Exhibit A on account of the items identified:

- Meet the requirements of the NAIC.
- Are computed in accordance with accepted actuarial standards and principles.
- Make a reasonable provision for all unpaid loss obligations under current terms of the contracts and agreements.

The company participates in a pool and I make use of the analysis of another actuary for that portion of the company’s reserves.”

a. (0.75 point)

Briefly describe three errors and/or omissions in the OPINION paragraph above.

b. (0.75 point)

Briefly describe three items that an actuary should consider in determining whether it is reasonable to make use of the work of another actuary.

c. (1 point)

Assuming the reserves for the pool are material, identify four items that should be disclosed in the RELEVANT COMMENTS section of the opinion.

22. (2.75 points)

The following information is for an insurance company that writes only two lines of business. All figures are as of December 31, 2013 and are shown in millions of dollars:

| | |
|--|-------|
| Total net recorded loss and LAE reserve | 750 |
| Commercial automobile written premium | 350 |
| Private passenger automobile written premium | 650 |
| Statutory surplus | 400 |
| Net income | 250 |
| Total adjusted capital | 400 |
| Authorized Control Level RBC | 150 |
| Low end of actuary's range of unpaid loss and LAE | 650 |
| High end of actuary's range of unpaid loss and LAE | 1,000 |
| Actuary's point estimate | 800 |

a. (2.25 points)

For each of the following work products, identify an intended user, propose an appropriate materiality standard, and justify its relevance.

- NAIC Statement of Actuarial Opinion
- Rate indication for commercial auto
- Opinion on the adequacy of reserves for a proposed merger or acquisition

b. (0.5 point)

Based solely on the proposed materiality standard for the NAIC Statement of Actuarial Opinion from part a. above, explain how the Appointed Actuary might address whether there are significant risks and uncertainties that could result in material adverse deviation.

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23. (3.5 points)

Given the following information for an insurance company (all figures are in millions of dollars):

| Development in estimated losses and loss expenses incurred prior to current year | | | | | |
|--|------|------|------|------|------|
| 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| 12 | 25 | 14 | -15 | 20 | 17 |

| Company's Year-End Policyholders' Surplus | | | | | |
|---|------|------|------|------|------|
| 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| 300 | 275 | 265 | 275 | 325 | 300 |

Company's 2013 Annual Statement and the Appointed Actuary's analysis:

| | Actuary's Gross Estimate | Actuary's Net Estimate | Company's Gross Carried | Company's Net Carried |
|--|--------------------------------|------------------------------|-------------------------------|-----------------------------|
| Loss reserves | 1,200 | 600 | 1,150 | 575 |
| DCC reserves | 800 | 400 | 600 | 300 |
| A&O reserves | 300 | 150 | 250 | 125 |
| Unearned premium reserves for long duration contracts | 100 | 80 | 90 | 80 |

In addition, the Appointed Actuary's range of reserve estimates is +/- 10% on both a gross and net basis.

a. (2 points)

Construct the table for items A through D that would appear in the Appointed Actuary's 2013 Actuarial Opinion Summary.

b. (1.5 points)

Propose language for item E of the Actuarial Opinion Summary regarding the company's adverse development over the past five calendar years.

24. (2.5 points)

An insurer wants to exit the homeowners market in a single state. The insurer has stopped writing new business and wants to enter into a property-casualty run-off agreement with a reinsurer.

a. (0.5 point)

Briefly explain the difference between a property-casualty run-off agreement and a novation.

b. (0.5 point)

Identify two situations where an insurer would not be eligible for reinsurance accounting treatment under a novation.

c. (1 point)

Identify and briefly describe two items that a regulator might review before approving reinsurance accounting treatment for a property-casualty run-off agreement.

d. (0.5 point)

Describe how the primary insurance company would record the amount paid to the assuming entity for a property-casualty run-off agreement.

25. (3.5 points)

a. (1.5 points)

A primary insurer has decided to reinsure policies written for an annual term effective January 1, 2014. For each of the following reinsurance provisions, select a purchase date and effective date of an annual reinsurance contract that satisfies that provision:

- Only prospective reinsurance
- Only retroactive reinsurance
- Both prospective and retroactive reinsurance

Briefly explain the selection.

b. (1 point)

Identify and briefly describe two conditions a reinsurance contract must meet in order to be accounted for as reinsurance.

c. (1 point)

For each of the conditions from part b. above, describe one reinsurance policy provision that would prevent the policy from being accounted for as reinsurance.

Exam 6-U.S. Regulation and Financial Reporting (Nation Specific)

October 27, 2014

POINT VALUE OF QUESTIONS

| QUESTION | VALUE OF QUESTION | SUB-PART OF QUESTION | | | | | | |
|----------|----------------------|----------------------|------|------|------|------|------|-----|
| | | (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| 1 | 2.50 | 0.50 | 0.50 | 0.50 | 1.00 | | | |
| 2 | 3.75 | 0.25 | 0.50 | 1.00 | 0.50 | 1.00 | 0.50 | |
| 3 | 3.00 | 0.50 | 0.50 | 1.00 | 1.00 | | | |
| 4 | 2.75 | 0.50 | 1.25 | 1.00 | | | | |
| 5 | 3.50 | 0.50 | 1.00 | 1.00 | 1.00 | | | |
| 6 | 4.75 | 1.50 | 2.00 | 0.25 | 1.00 | | | |
| 7 | 2.50 | 0.50 | 0.50 | 0.50 | 1.00 | | | |
| 8 | 3.25 | 2.25 | 0.50 | 0.50 | | | | |
| 9 | 2.25 | 1.00 | 0.75 | 0.50 | | | | |
| 10 | 2.50 | 2.50 | | | | | | |
| 11 | 2.50 | 0.50 | 0.50 | 0.50 | 1.00 | | | |
| 12 | 6.00 | 3.00 | 2.25 | 0.75 | | | | |
| 13 | 4.00 | 4.00 | | | | | | |
| 14 | 2.00 | 1.00 | 1.00 | | | | | |
| 15 | 6.00 | 6.00 | | | | | | |
| 16 | 2.75 | 2.75 | | | | | | |
| 17 | 2.25 | 0.75 | 0.50 | 0.50 | 0.50 | | | |
| 18 | 4.50 | 3.50 | 0.50 | 0.50 | | | | |
| 19 | 3.25 | 1.25 | 2.00 | | | | | |
| 20 | 3.00 | 1.00 | 1.00 | 1.00 | | | | |
| 21 | 2.50 | 0.75 | 0.75 | 1.00 | | | | |
| 22 | 2.75 | 2.25 | 0.50 | | | | | |
| 23 | 3.50 | 2.00 | 1.50 | | | | | |
| 24 | 2.50 | 0.50 | 0.50 | 1.00 | 0.50 | | | |
| 25 | 3.50 | 1.50 | 1.00 | 1.00 | | | | |
| TOTAL | 81.75 | | | | | | | |