

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.

EXAM 6 – UNITED STATES, FALL 2014

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.

EXAM 6 – UNITED STATES, FALL 2014

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

EXAM 6 – UNITED STATES, FALL 2014

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
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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
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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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EXAM 6 – UNITED STATES, FALL 2014

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.

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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.

EXAM 6 – UNITED STATES, FALL 2014

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							

SAMPLE ANSWERS AND EXAMINER'S REPORT

GENERAL COMMENTS:

- Candidates should note that the instructions to the exam explicitly say to show all work; graders expect to see enough support on the candidate's answer sheet to follow the calculations performed. While the graders made every attempt to follow calculations that were not well-documented, lack of documentation may result in the deduction of points where the calculations cannot be followed or are not sufficiently supported.
- Incorrect responses in one part of a question did not preclude candidates from receiving credit for correct work on subsequent parts of the question that depended upon that response.
- Candidates should try to be cognizant of the way an exam question is worded. They must look for key words such as "briefly" or "fully" within the problem. We refer candidates to the Future Fellows article from December 2009 entitled "The Importance of Adverbs" for additional information on this topic.
- Some candidates provided lengthy responses to a "briefly describe" question, which does not provide extra credit and only takes up additional time during the exam.
- On the other hand, some candidates provided "list-type" responses for "describe" or "fully describe", which do not demonstrate the candidate's knowledge.
- Generally, candidates were fairly well prepared for this exam. However, candidates should be cautious of relying solely on study manuals, as some candidates lost credit for failing to provide basic insights that were contained in the syllabus readings.

EXAM STATISTICS:

Number of Candidates	507
Available Points	81.75
Pass Score	56.25
Number of Passing Candidates	195
Effective % Passing	40.97

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 1	
TOTAL POINT VALUE: 2.5	LEARNING OBJECTIVE: A1, A4
SAMPLE ANSWERS	
Part a: 0.5 point	
<ul style="list-style-type: none"> • Affirmed state regulation for the business of insurance • Affirmed state taxation for the business of insurance • Staying of application of the various anti-trust acts (except Sherman) for a few years. Subsequent to that point they would apply to the extent that the state doesn't regulate such activity • Affirmed that boycott, coercion or intimidation that violates the Sherman Act is illegal • Affirmed the application to insurance of various federal laws, including the National Labor Relations, Fair Labor Standards and the Merchant Marine Act. This prevented states from controlling labor relations • Federal laws that apply exclusively to insurance supersede state regulation in that area • Allowed Bureau Rating to encourage rate adequacy and healthy competition 	
Part b: 0.5 point	
<ul style="list-style-type: none"> • What did "regulated" mean? • What constitutes the business of insurance? 	
Part c: 0.5 point	
<ul style="list-style-type: none"> • Development of model laws to prevent/limit the regulation of insurance by the federal government • Development of model laws to allow rate regulation by the states • Development of model laws to prohibit certain anti-competitive activities / behavior • Development of model laws to promote equitable ratemaking and ensure rates were not excessive, not unfairly discriminatory, and were adequate • Development of model laws and encouraged states to adopt them via accreditation program 	
Part d: 1.0 point	
<ul style="list-style-type: none"> • Legal - The state laws passed following McCarran Ferguson typically allowed companies to work together to pool data to determine loss costs (generally through rating bureaus or other similar organizations). Thus, this action would be legal as long as it wasn't accompanied by further anti-competitive behavior. • Illegal – This type of action is specifically banned under the Sherman Act, which McCarran Ferguson indicated applied to insurance. 	
EXAMINER'S REPORT	
Part a	
Candidates generally performed well. Those that did not often confused McCarran-Ferguson with the Southeast Underwriters decision.	
Part b	
This part was challenging as it required synthesis across syllabus materials (Business of Insurance is well discussed in Porter, open questions around state regulation is more fully discussed in Wagner). Candidates often failed to address one of the two key areas.	
Part c	

SAMPLE ANSWERS AND EXAMINER'S REPORT

Candidates were expected to know that the NAIC responded to McCarran-Ferguson by developing and encouraging the use of model laws at the state level to create a framework where state regulation was sufficient to limit / prevent federal regulation of insurance. Candidates could have discussed various aspects of the model laws, including their development, contents, purpose with respect to equitable ratemaking or prohibiting anti-competitive behavior, purpose with respect to preventing / limiting regulation of insurance by the federal government, or NAIC encouragement of states to adopt them.

Candidates who struggled generally either failed to identify the model laws as the NAIC response, misidentified the role of the NAIC, or provided other subsequent actions of the NAIC that were not direct responses to McCarran-Ferguson. Some candidates combined two related responses into a full response, but provided additional, redundant detail. This did not hurt the candidates' scores, but likely cost them extra time on this question.

Part d

Most candidates scored well. Candidates were expected to know that pooling of data is generally allowed following McCarran-Ferguson, but that boycott remains banned under the Sherman Act. They needed to provide an argument as to why each is the case and each argument needed to include reference to the regulatory framework underlying it. However, many candidates omitted the regulatory framework from one or the other scenario.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 2	
TOTAL POINT VALUE: 3.75	LEARNING OBJECTIVE: A1, A2, C2
SAMPLE ANSWERS	
Part a: 0.25 point	
<ul style="list-style-type: none"> • It gives lower risks the rate they deserve based on their expected loss cost and eliminates possible subsidization • Rate of policy should be proportional to/reflective of expected losses/expected cost. It should be 'cost-based' in that policies with higher costs have higher rates. • Rates must vary based on differences in individual risk. • Each <u>individual's</u> rate is an estimate of that <u>individual's</u> expected loss costs. • Insurance rates should reflect the difference in relative risk between insureds. • Rate differences among segments should be justified by difference in costs. • Rates are equitable for the consumer based on relative risk, not equal cost for all. • Price to risk, high risk → high price and vice versa 	
Part b: 0.5 point	
<p>Should not disproportionately impact Protected Classes:</p> <ul style="list-style-type: none"> • Rates should not be based on factors that correlate highly with race, ethnicity, religion and other protected factors. • Should not discriminate towards certain socioeconomic groups • Not unfairly discriminatory towards certain protected classes of people • Rates must not correlate with social aspects such as race or religion. • Cannot disproportionately affect a certain class of people. • <u>Non-discriminatory</u> -> McCarty is very sensitive to factors that appear to be correlated with race or negatively impact certain groups of people. • According to McCarty, one condition for rates to be considered equitable is that rates are not unfairly discriminatory towards protected classes. For example, using credit scores may end up charging higher rates for certain ethnic or religious groups if they tend to have higher credit scores. <p>Causal Link:</p> <ul style="list-style-type: none"> • Rating variables are characteristics that are influenced by insured. • Factors that the insured is charged for (factors used in rate calculation) are under the insured's control. • Proven that the rate variables are chosen because they are predictive of losses. • Another condition is that rates actually correlate to the underlying risk. For example, McCarty expressed concerns that a downturn in the economy could cause abrupt and unjustified changes in credit-based insurance scores. • Should be an intuitive link between the rate and the insurance risk. • <u>Undesirable</u>-> McCarty does <u>not</u> think rates should be opaque->believes consumer should understand how their characteristics/risk factors and behavior will impact their rates. • Rating mechanism is not opaque to consumers. • Consumer should be able to understand rate and improve behavior, e.g., credit scores are difficult to understand/correct. 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

Not subject to large inaccuracies:

- Should not be subject to inaccuracies, e.g., credit scores are often wrong.
- Rates should not be based on factors/data that has frequent errors and inaccuracies (like credit score)

Part c: 1 point

Within a risk classification system:

- Using texting frequency will create a more refined classification system and make the rate more aligned with true risk condition, thus equitable.
- Is equitable as it can be given that number of texts is correlated with frequency of accidents.
- Using texting frequency would be equitable because it is significantly related to the amount of risk.
- It would be equitable as it would allow insurers to better price for differences in risk, reducing cross subsidies.
- Yes, equitable because it's under the insured's control. It's illegal to text while driving in most states and it's not unfairly discriminatory.
- Yes because each person within either group would be charged the same amount.
- Unequitable– if the texting data was self-reported it could be prone to error which would make it unreliable.

From the perspective of an individual consumer:

- Not equitable as there is no clear causation between texting and driving
- Would have privacy issues. Meanwhile, will have disparate impact on certain groups of people, e.g., those sending messages frequently while not driving. This is not equitable.
- Not equitable as texting while not driving shouldn't cause more accidents. Texting may also be a more common form of communication among a certain protected class of people.
- This may not be equitable because they may not see/agree with the link between # of texts and their insurance risk, and it may unfairly punish those that have to text a lot (e.g., for work/business).
- Not equitable since insured may be careful to never text while driving but still text heavily overall. That way he would still be classified as a high-risk driver under that system.
- No, people who text more tend to be younger.
- Not equitable. Rate should be based on the costs associated w/an individual risk transfer. An individual may text more due to requirements from his job but may not be a worse risk.
- Equitable because insureds recognize that texting while driving is dangerous so they will not be unhappy about it.
- Yes, they should be aware that it's being used as a variable and it's in their control so it should be equitable.
- Equitable from the individual consumer – if consumer agrees texting is a cause of accidents then they would consider using it as a rating variable fair.
- Equitable because people would understand why they have higher rates since they know their texting behavior is a risky driving habit.

SAMPLE ANSWERS AND EXAMINER'S REPORT

- Yes this variable could also be seen as equitable from customer's perspective as there is a lot of attention to texting as a cause of accidents. Customer could understand why this variable differentiates.
- Individual consumer can make effort to reduce texting frequency therefore equitable.

Part d: 0.5 point

- Due to anti-selection, high risk insured tend to purchase insurance from insurer X, thus may result in insolvency issue for insurer X.
- Insurer X may be adversely selected against as its rates are relatively low for high-volume texters who are more risky. Rates may be inadequate.
- Regulator may be concerned that insurer X will face adverse selection in that high texting/high risk insured will flock to them as their prices are lower, whereas lower risk insureds will leave to get better rates elsewhere.
- Insurer X might be adversely selected against since its prices will be too high for the low risks and too low for the high risks. High risks will migrate to Insurer X and may cause insolvency.

Part e: 1 point

Generally any IRIS ratio with the proper description and trend identification would be acceptable if related back to the issue of adverse development. Below are examples of accepted IRIS ratios. Each sub-bullet under the ratios is meant to indicate an acceptable response to support the usage of that particular ratio by a regulator.

- 2 year operating ratio:
 - Is the insurer's profitability decreasing due to adverse selection?
 - Regulator should look for increasing trend and ratio > 100% to identify unprofitability
 - Expect loss ratio component (and thus the overall ratio) will have increased since frequency increases and rate adequacy (and thus premium adequacy) has deteriorated as X has attracted higher risks.
 - Regulator should look for the underwriting result to become unprofitable, i.e., ratio increasing above 100%
- NWP to Surplus:
 - Insurer X may see premium growth with smaller surplus increase (or even decrease), with ratio becoming higher over time.
- Change in NWP:
 - See if it's grown in the last year. It's an indicator if insurer did not take steps to actively grow business that it's being adversely selected against.
- Gross Δ PHS
 - As the increase high risk insureds will raise liabilities and therefore decrease PHS, should look for negative trends.
 - Look for a downward trend to see if the overall profitability is changing
- 1 year loss development to surplus:
 - See if there's adverse development showing that insurer X is getting more high risk insureds (all else equal, assuming ins x hasn't changed its growth strategy)
 - Is the insurer having to increase its reserves as it recognizes loss emergence from high texters?
 - Losses may start to develop unfavorably due to poor risks, thus driving ratio up

SAMPLE ANSWERS AND EXAMINER'S REPORT

over time.

- 2 year loss development to PHS:
 - Would expect to see worsening since you expect loss reserves experience to be worse as low risks leave and high risks added.
- Change in Adjusted PHS:
 - Adverse selection will lead to unprofitability which will flow through to income. Ratio will capture PHS change due to operations only. Regulator should look for negative trends.
- Estimate Reserve Deficiency to PHS:
 - The mix of business will have changed and if insurer X does not adjust their reserving practices they may experience increasing deficiencies.
 - Expect ratio to decrease since X's loss experience is deteriorating and the reserve: EP ratios calculated from prior 2 years are likely understated since X has been attracting worse risks over time and thus its current level of reserves will now be higher (due to increased frequency → expect more individual reserves put up)
 - Regulator should check to see if the change in mix of business is leading to reserve deficiencies which would be evident if this ratio increases, especially above 25%
 - If this starts increasing because reserves are developing more than expected they should be concerned that they are receiving worse risks and haven't been accounting for it in their reserves.

Part f: 0.5 point

Find a proxy variable for texting:

- Insurer X could refine its rating based on other rating variables to avoid adverse selection by picking up texting variable with something correlated but more reliable.
- Find other rating variables that are more predictive of loss.
- Work on data to find out the relationship between texting frequency and age of driver, then adjust the factors accordingly. Usually young drivers text more than mature drivers so this way they could still differentiate risks.
- It could use other variables like # of calls while in car as a proxy for texting.
- It can use other rating variables as a proxy for texting frequency such as insured's data/texting plan with his/her cell phone.
- Insurer X could introduce a variable that's similar to text frequency which would capture the same correlation.
- Insurer X could use another variable that is related to texting and also predicts claim frequency (a proxy variable).
- Use proxy of text frequency as a variable such as amount of data used on each insured's cell phone.

Implement a brand new variable:

- X could identify another rating variable, such as years of driving experience, to segment risk between insureds and skim the cream from other insurers.
- Insurer could instead incorporate a variable that it prices based on whether the insured talks and drives – this is also very dangerous.
- Find a new variable that others aren't using to segment risks for rating and skim the cream.

SAMPLE ANSWERS AND EXAMINER'S REPORT

Become a high-risk only company:

- It could raise its rates to the level needed for the high-texting drivers and become a non-standard company. This will protect its financial condition because it will collect enough premium to compensate for the extra losses.
- Instead of using it as a rating variable, use it as a classification variable to put risks into appropriate company for tier pricing.
- It could raise rates and specialize in high risk drivers.
- Decrease underwriting standards, market to higher risk classification and charge an aggregate rate level commensurate with the higher expected losses of those who are frequent texters.
- Address via underwriting guidelines → may use texting frequency in risk selection and company placement.
- X could increase its rates to reflect appropriate amount for high risk drivers only. Then write only high risk drivers but could be profitable.
- Could decide to target consumers who text a lot directly and become a company that takes on a lot of non-standard business but makes sure to charge rates that are appropriate for the loss costs of these high-risk insureds.
- Could use texting frequency as an UW guideline and tiering criteria to place risks.
- It can use it in the underwriting guideline to allocate risks into two companies which can have different overall rate levels.

EXAMINER'S REPORT

Generally candidates scored well on parts c-e with the interpretive responses, but many failed to provide adequate action in part f, and some struggled with the specific recall required on parts a & b, often citing concepts related to rating variables from the ASOP on ratemaking, but not explicitly related to the cost-based condition or McCarty paper.

Part a

The cost-based condition for insurance rates to be considered equitable is discussed in the Kucera paper. Some candidates missed this distinction and instead answered with the SOP on ratemaking providing the definition of an actuarially sound rate. However, an actuarially sound rate does not hit upon the cost-based condition that differences in rates within a risk classification system reflect differences in expected cost based on particular risk characteristics.

Part b

Part b explicitly asked for conditions for insurance rates to be considered equitable according to the McCarty paper. Most candidates were able to come up with 1 consideration discussed in this particular paper but either failed to list a 2nd condition or instead wrote down an idea that was not tied to McCarty.

Common errors included mentioning limiting premiums for affordability reasons or ensuring premiums are not excessive. Those considerations are reasons for government insurance programs (Government Insurer's Study Note or AAA Flood Insurance Program) and ensure social equity but are not the concepts of equity discussed in McCarty. His concern was to avoid unfair discrimination against protected classes, maintain a causal link between the rating variable and loss, ensure the variable can be impacted by sound decisions of the insured, and avoid variables that are subject to inaccuracies/errors or otherwise opaque.

Part c

SAMPLE ANSWERS AND EXAMINER'S REPORT

Candidates performed well on this part, and most argued that texting was equitable from the perspective of the risk-classification system and not equitable from the perspective of an individual consumer. Alternative arguments were also accepted if proper justification was provided (see sample answers above). Common errors were related to discussing why texting might not be a good rating variable (e.g., costly to collect data); however these reasons do not comment on whether it is in fact equitable.

Part d

Candidates performed well on this part and correctly identified that Insurer X may be subject to adverse selection. Incorrect answers appeared to be misinterpreting the question, as the answers reflected conclusions that would follow if Insurer X had in fact implemented the rating variable.

Part e

The majority of candidates scored well on this part and correctly identified 2 IRIS ratios and how they might trend to address the concern of adverse selection identified in part d. Common errors were identifying an IRIS ratio, but not stating how it may trend to indicate concerns to the regulator.

Part f

Many candidates struggled with this part. Some offered actions that would not ultimately allow the insurer to remain competitive.

Common errors included:

- Increase rates alone (without elaboration regarding raising rates and then specifically targeting the high-risks to become a specialty carrier).
 - Raising rates alone will just further drive the good risks in the market away from the company and likely cause any current good risks on the book to leave.
- Suggesting Insurer X purchase reinsurance to improve IRIS ratio.
 - This does not fix the underlying issue of adverse selection and would be a costly temporary fix to mask profitability issues.
- Using texting as an UW variable for risk selection and only select the good risks (without elaboration regarding using UW criteria to select risks and place them in a company tiering program with higher/lower rates).
 - Only selecting the good risks is likely not possible unless the rate itself is fixed to appropriately reflect the risk. If Insurer X charges an average rate of Y, but the good risks can get a rate of .8Y from competitors, X will not be able to write any new business. Furthermore the good risks currently insured will likely again leave to find that lower rate and the adverse selection will continue.
- Marketing to specific segments identified to be good risks and writing them such as elderly, non-texters, etc.
 - This would be similar to using texting as an UW variable. Unless the actual rate structure is adjusted to reflect the price differentiation in the rest of the market, good risks will not be willing to pay more and buy from Insurer X.
- Lowering expenses, controlling claim costs, selling customers on higher levels of service to attract the good risks to buy policies or stay with the Insurer.
 - Although value-selling may work for some consumers, any gain would likely not be sufficient to offset the adverse selection that the company would still be subject to by charging a single average rate.

SAMPLE ANSWERS AND EXAMINER'S REPORT

- Not writing any high risk consumers would ultimately lead to minimal new business and a loss of the renewal book.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 3	
TOTAL POINT VALUE: 3	LEARNING OBJECTIVE: A2, A4
SAMPLE ANSWERS	
Part a: 0.5 point	
<ul style="list-style-type: none"> • States must make it easier for insurance producers to operate in multiple jurisdictions. Reflects increasing need for insurance products that span multiple regions since the economy is more interconnected now than ever. • The Gramm-Leach-Bliley (GLB) Act identified who would regulate companies that had both banking and insurance sectors. States continue to regulate insurance while federal government regulates banking. It responds to changes in the economy since entities with both banking and insurance didn't exist in the earlier part of the 20th century. • The Gramm-Leach-Bliley Act has responded to changes in the economy as one holding company could have an investment, banking, and insurance company. With the current economy filled with mergers and acquisitions, this is a good response. • Provision to disclose information sharing practices between banks and insurers; this responds to the needs of changes to the economy because of increasing privacy concerns of consumers. 	
Part b: 0.5 point	
<ul style="list-style-type: none"> • The Dodd-Frank act responded to changes in the economy by establishing the FIO and allowing it to negotiate covered agreements with alien insurers. This was driven by the increasing global economy and the inability of state regulators to a function on a global level. • Makes it easier for non-admitted insurer to get business. Remove diligent search criteria of admitted market. Costs of admitted market search plus needing specially licensed producer in each state in order to place business with non-admitted insurer outweighed. Benefits of unique products offering/additional capacity they bring to the market, so Dodd-Frank recognized this and now the costs of regulating non-admitted insurer are low and benefits of system are much higher. • Premium tax is collected by domicile state only for non-admitted insurers --> the benefit that exceeds the cost is that it simplifies business for non-admitted insurers • Companies receive credit for reinsurance in each jurisdiction so long as regulator in home state gives credit and is NAIC accredited (or comparable). Increases efficiency and reduces cost of regulation. Jurisdictions rely on judgment of home state; less work. • Reinsurance only regulated by domiciliary state regulator of reinsurer, which reduces costs of regulation as reinsurers normally operate in multiple states 	
Part c: 1 point	
<p>Any two of the following:</p> <ul style="list-style-type: none"> • Insurer must be licensed in each state where they do business -> Each state DOI can perform exams on the company meaning that multiple states will be independently reviewing their financial strength => more likely any potential issues will be found. • NAIC Financial Analysis Division -> performs quarterly reviews of nationally significant insurer -> this is independent from and in addition to review performed by the state DOIs => increases likelihood that large insurers in financial trouble will be found in time to take action and prevent insolvency. • NAIC FAWG monitors nationally significant insurers and individual states monitor these 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

insurers as well.

- Duplication occurs when multiple rating agencies provide a rating for the same company
- Federal Insurance Office (FIO) reviews nationally significant insurers which may overlap with state regulation.
- Publicly-traded insurers must file 10-K with federal government (SEC) and file annual statements in every state it operates in. Again multiple eyes help spot troubling financial situations.
- NAIC's Analyst Team System evaluates insurers' financial strength to detect those that are in immediate need of regulatory attention and has regulators analyze them again.
- US insurer that also operates in Europe may need to fulfill state solvency requirements as well as Solvency II requirements.

Part d: 1 point

- Challenge: Regulatory forbearance: Regulators may fail to take prompt actions when needed. Solution: Peer review/pressure can help solve this. Each individual state can take actions if necessary – this puts pressure on regulators to act.
- Challenge: RBC factor-based capital requirement does not explicitly include important elements such as catastrophe risk and Asbestos & Environmental reserve risk and these are important solvency risks for companies. Solution: Develop catastrophe and Asbestos and Environmental components of RBC utilizing experts.
- Challenge: State regulators may be aligned with a special interest instead of public interest. Solution: Other states can pressure domiciliary state to act if special interest is causing problems for public or take their own action.
- Challenge: Solvency regulation in the US is based on the RBC ratio which is a formulaic factor-based model. This approach does not take into account the unique risks of specific insurers. Solution: Changing this system to something like an ORSA would allow companies to factor in their unique risks and better account for their solvency.
- Challenge: Human Fallibility - people make mistakes and can miss warning signs. Solution: Duplication, where other regulators can also review same company, which makes it more likely for troubled companies to be detected.
- Challenge: One challenge of solvency regulation is the lack of uniformity across states in terms of rates, forms and regulations. The NAIC attempts to account for this with its accreditation standards. Solution: Move to a national regulatory body to reduce cost and increase uniformity.

EXAMINER'S REPORT

Most candidates performed very well on this question, being able to demonstrate their understanding of regulatory systems and the Gramm-Leach-Bliley Act and Dodd-Frank Act.

Part a

Common errors included:

- Incorrect provision (e.g., Banks are allowed to directly own insurance subsidiaries or Banks are allowed to underwrite insurance directly)
- Vague language while describing a provision (e.g., Banks are regulated by federal government, with no mention of insurance company regulation)
- Listing what criteria was met without describing how it was met
- Forgetting to address how the provision met the criteria.

Part b

SAMPLE ANSWERS AND EXAMINER'S REPORT

Common errors included:

- Incorrect provision (e.g., Mixing up reinsurer regulation and non-admitted insurer licensing)
- Vague language while describing a provision (e.g., Premium tax being paid to the home state, without describing what type of insurance and whose home state)
- Listing what criteria was met without describing how it was met.
- Forgetting to address how the provision met the criteria.

Part c

Common errors included:

- Listing but not describing the example.
- Repeating essentially the same form of duplication for the second example.
- Not mentioning the entities involved in duplication of solvency regulation.

Part d

Common errors included:

- Listing but not describing challenge and/or solution
- Describing a challenge but not proposing a solution
- Describing a challenge but the solution does not explain how the challenge is resolved.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 4	
TOTAL POINT VALUE: 2.75	LEARNING OBJECTIVE: A3
SAMPLE ANSWERS	
Part a: 0.5 point	
<ul style="list-style-type: none"> • A risk retention group exists to provide commercial liability coverage to its owners who may have been unable to find available or affordable coverage in voluntary markets. • To pool funds to assume and spread their own commercial liability risks by companies engaged in business activities that have similar related risks. 	
Part b: 1.25 points	
<p>Large corporation:</p> <ul style="list-style-type: none"> • Large Corp -> Traditional Insurer. Corporation might be big enough to self-insure, or at least set a very high deductible. Also, large corporations may have better risk control in place, and enough experience to qualify for schedule rating / experience rating discount from insurers. • Large corporation will buy from a traditional insurer because it is a sophisticated buyer that is better able to negotiate rates / cost savings or leverage. • Large corporation will buy from a traditional insurer because they have a diverse risk portfolio. • A large corporation has complex risk transfer and unique need for coverage which can be met by an RRG. Also, the cost savings from an RRG would be significant. • Large corporation will buy from an RRG as it lowers initial expenses (no commissions) and the large company may have risks that a traditional insurer is unwilling to write. <p>Small business:</p> <ul style="list-style-type: none"> • A small business is more likely to purchase from insurance company due to the relatively simple risk nature and relatively small cost of insurance. Purchasing from an RRG would not be subject to protection from state insurance guaranty fund. • A small company would choose traditional insurer to avoid large volatility since insurance costs are a small portion of their costs. • A small business -> more likely to purchase from RRG. Can pool risk with other small companies, lower costs since don't need to pay profit load of insurance company, incentive for members to control losses may keep loss costs down. • A small business would purchase from an RRG due to specialization / better service for unique risks. 	
Part c: 1 point	
<ul style="list-style-type: none"> • RRGs cannot participate in state guaranty funds, so it is very important to be financially strong and well-priced. (Credit also given for other answers noting lack of guaranty funds and mentioning solvency or claims paying ability.) • RRGs only have to be licensed in home state to operate in other states. This means that financial ratings allow regulators in non-domiciled states to better monitor RRGs. 	
EXAMINER'S REPORT	
<p>This question was challenging and some candidates struggled to demonstrate an understanding of RRGs and different strategies for risk transfer.</p>	
Part a	
<ul style="list-style-type: none"> • Most candidates performed well, providing a full description as shown above in the sample answers. Common errors included providing incorrect purposes of an RRG or 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

giving only a partial description.
Part b
<ul style="list-style-type: none">• This part was challenging because of the need to identify the difference between insurance purchases made by a large corporate buyer and those made by a small corporate buyer. Common errors included providing only a partial description of the rationale, or providing statements unrelated to the question at hand (for example, discussing whether it was better to form an RRG versus joining one).
Part c
<ul style="list-style-type: none">• This part was challenging because candidates needed to associate a characteristic of an RRG with some benefit of a financial rating. Common errors included listing the benefits of a financial rating without explaining how those benefits applied to an RRG.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 5	
TOTAL POINT VALUE: 3.5	LEARNING OBJECTIVE: A1, A2, C2
SAMPLE ANSWERS	
Part a: 0.5 point	
<p>Concern 1:</p> <ul style="list-style-type: none"> • Not insuring homes less than 100K is unfairly discriminatory- may have disparate impact on racial, ethnic groups. • Not insuring homes worth less than \$100,000 may be unfairly discriminatory against protected classes or low income groups. • The floor on home values (possible red-lining) <p>Concern 2:</p> <ul style="list-style-type: none"> • Forcing renters to buy auto is a tie-in sale. This is illegal under Clayton Antitrust Act and under most state laws. • Tying Auto and Renters: it is likely a lot of renters are young and may have poor driving experience. You may be exposing yourself to a lot of young auto drivers with this requirement. • The tying of auto insurance with the property insurance is illegal under Robinson-Patman Act. 	
Part b: 1 point	
<p>Regulatory investigation 1:</p> <ul style="list-style-type: none"> • Large growth in NWP 40/27-1 = 48%, outside IRIS 3 range. • NWP grew significantly (40/27)-1 = 48% > 33% IRIS 3. • The large growth in NWP from the previous year. Rapid growth is a common cause of insolvency & may indicate lessening UW standards. <p>Regulatory investigation 2:</p> <ul style="list-style-type: none"> • Company investment portfolio has shifted significantly towards stocks and real estate and away from bonds. • Invested Assets have been shifted over to much riskier investments (drop in Bonds, increase in Stocks). Based on the increase in cash and shift to risky investments, this company appears to be in financial distress & is trying to raise money to pay claims. • This insurer has significantly increased the % of real estate & stocks of its admitted portion: Stocks from 19.2% to 39.2% and RE from 3.8% to 11.8%. Stocks and real estate have less certain value in the event of liquidation & therefore less suitable to pay PH claims. • Change in investments: Bond Holdings - \$25 K, Stock holdings + 25 K, Cash +15 K, RE for production + 9k. It is abnormal for insurer to have more stocks than bonds. • Has large % of assets in cash – could be investing some of these funds and earning a return • The holding of stocks increased significantly from 15 M (or 19% of assets) to 40M (39% of assets). Stocks are volatile. Additionally, they are common stock, not preferred. • An increase in assets held in stocks. Stocks can be very volatile. • Real Estate for income also went up a lot as a % of assets. Real Estate for investment can be difficult to redeem in a need for cash. Why did this go up so much? 	
Part c: 1 point	
<ul style="list-style-type: none"> • Any combination of 4 unique actions would work. For example: This company definitely needs looking into. The improper market conduct could trigger 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

supervision even if the RBC ratio is good. Actions may include: (1) Restrict new business (Premiums) (2) Require permission before making investment decisions. (3) May order them to discontinue UW restrictions discriminating against lower value homes. (4) Require property coverage even without auto.

Other actions:

- Require insurer to provide coverage for homes < 100 k.
- May prohibit product bundling.
- Immediately cease tie-in sale of auto.
- Restrict growth to 33% or less.
- The regulator could restrict writing new business.
- Require them to rewrite underwriting guidelines and limit their new and renewal business until they do so.
- May restrict purchase of stocks.
- Force them to change investment allocation.
- Restrict the investment in stocks & RE and increase in bonds.
- Prohibit certain investments.
- The regulator could mandate shifting back to investing mainly in bonds.
- Monitor investment activities & transactions, or require the insurer to alter its portfolio mix.
- May begin off-site examination of the company's books.
- Further review the financial health of the insurer through on-site financial exams to identify problem areas.
- On-site exam – regulator may go to the company to develop a better view of the company's risk
- May begin a market conduct exam.
- File for receivership
- Mandatory Corrective Action – If regulator believes PH could be impacted adversely by financial health of company, regulator can make company take certain actions (i.e., limit business, reduce expenses, reinsurance coverage).
- Administrative Supervision – Given hazardous condition, regulator could seek court approval to formally take control of company. All manager decisions need commissioner approval (reinsurance, mgmt. changes).

Part d: 1 point

- NAIC may coordinate efforts and communication between different states as this insurer operates in multiple states. NAIC could also conduct analysis using tools like FAST or through FAWG and give recommendations to regulators on corrective actions.
- Analyst team will review financial statements and IRIS ratios to determine whether immediate regulatory attention is warranted if fact finding reveals significant areas of concern. May be recommended to the FAWG for review if this insurer is nationally significant. FAWG may provide advice on appropriate regulatory strategies and methods. NAIC also maintains databases that include consumer complaints against insurance companies and will provide that info to the regulator.
- The Analyst Team System might have reviewed this insurer, looking at IRIS ratios and using FAST tools. They would have noted the problems mentioned above and forwarded to

SAMPLE ANSWERS AND EXAMINER'S REPORT

FAWG for review. FAWG would advise the state regulator on how to fix the situations and would act as check to ensure that proper action is taken.

- NAIC would provide data to the regulator as needed (asset valuations, insurer past history, state of insurer in the auto/ homeowner market in general, etc.) NAIC's FAD could perform independent review of the insurer and share findings with domiciliary regulator. If insurer was nationally significant, FAD identifies areas of concern, refers to FAWG for further review and the FAWG may question the domiciliary regulator/ provide forum for discussion. NAIC also maintains database of consumer complaints.
- NAIC SVO values insurer's investments. May determine insurer's investments in riskier asset classes (i.e., real estate, stocks) is too great. NAIC is a source of guidance for regulator. Performs research for regulator's benefit, provides statistical databases for insurer to easily monitor solvency of insurers in its states, provides info on Congressional initiatives regarding insurance.

EXAMINER'S REPORT

The candidates drew on their knowledge about how regulators investigated companies that might be in trouble and what actions the regulator could take to bring a company out of trouble. The question was somewhat challenging since it asked candidates to draw some conclusions about probable actions of the regulators, based on actions of the company. The candidates generally did well in noting concerns about the company's behavior, but had more difficulty in describing the involvement of the NAIC.

Part a

Common error: When discussing the limitation of insurance to those homes valued over \$100,000, some candidates stated that the company had a higher risk of CAT losses, etc. due to insuring higher value homes. However, this answer does not address market conduct.

Part b

Common error: Repeating essentially the same issue (for example, stating that the increase in stocks and the decrease in bonds were two separate issues).

Part c

Common errors included:

- Discussing an action to be taken about a specific concern not described in a. or b.
- Not describing an action to be taken, but rather, indicating that the regulator should check or review other areas such as other IRIS ratios, reserves, etc.
- Discussing increasing surplus or capital. Nothing was mentioned about capital or surplus or the amount of the reserves in the question, so no conclusion can be drawn about these issues.

Part d

A common error was to state that the NAIC can require actions. The NAIC can suggest actions, but only regulators can require actions.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 6	
TOTAL POINT VALUE: 4.75	LEARNING OBJECTIVE: A5
SAMPLE ANSWERS	
Part a: 1.5 points	
<p>Need to mention characteristics of both WC and PL for each of the following:</p> <p>Length of time between claim reporting and payment:</p> <ul style="list-style-type: none"> • WC likely to pay the claim quickly whereas PL may go through litigation process to defend their product <p>Likelihood of payment:</p> <ul style="list-style-type: none"> • WC as it pays without fault in most if not all states • Payment more likely under WC because there are guaranty funds • WC, the manufacturer may be bankrupt or nearly bankrupt as they are exposed catastrophically while the various employers would have fewer claimants • Since WC is often involved in state funds as well, there is less chance of insolvency • A claim brought under PL is subject to coverage disputes and decision by jury if brought to court • PL company may become bankrupt if a lot of suits and be unable to pay <p>Amount of payment:</p> <ul style="list-style-type: none"> • WC – would benefit because medical benefits are unlimited for WC policies • WC – subject to state benefit amounts that may have a cap • PL offers the chance to receive medical and indemnity damages as well as pain and suffering damages. • PL has stated coverage limits • Benefit more from PL, you could get a larger settlement with punitive damages • Defense costs may be significant, PL likely includes these in limit 	
Part b: 2 points	
<p>Number of claimants:</p> <ul style="list-style-type: none"> • Decrease since only those with real injury will file • Decrease as workers without symptoms less likely to sue • Decreases as it is less convenient to file a claim because each have to look and hire a lawyer • Decrease since it is harder to supply evidence • Decrease since claims awareness falls <p>Average defense costs:</p> <ul style="list-style-type: none"> • Lessened due to fewer claimants per trial • Decrease per claimant since only injured will file and they deserve the payment • Decrease per defendant since no longer have to defend less injured claimants • Increase per claimant as defense lawyers would only be addressing one claimant per case and have to repeat many of the same tasks including discovery for each claimant • Increase per claimant since each claim filed would be unique and lawyers would need to do extra work to understand and defend unique claim • Increase per claimant as claims that are filed will be more complicated perhaps <p>Average indemnity claim amounts:</p> <ul style="list-style-type: none"> • Decrease, more likely to have a substantial indemnity amount in a class action suit because 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

<p>it needs to cover everyone. Individual awards would probably be less.</p> <ul style="list-style-type: none">• Likely to increase as the remaining claims are more likely to come from the more seriously injured.• When class action filed, some claimants who are not severely affected by the disease may still get a large compensation because judge can't examine each individual. With each smaller suit, each individual may be evaluated more carefully, so some may receive more compensation, some may receive less. <p>Total claim dollars paid to all claimants:</p> <ul style="list-style-type: none">• Decrease, the drop in number of claimants offsets increased severity• Increase, most likely increased claim payments would outpace fewer claimants• Will go up or down, each individual who files will receive more compared to class action; however, there are less claimants to sue
<p>Part c: 0.25 point</p> <ul style="list-style-type: none">• Statutes that dictate the minimum level of medical criteria a claimant must meet in order to file a suit.
<p>Part d: 1 point</p> <p>Number of office workers filing claims:</p> <ul style="list-style-type: none">• Decrease as those who are not seriously injured would not meet the criteria <p>Average claim amounts awarded to office workers:</p> <ul style="list-style-type: none">• Increase as only seriously injured workers who require more expensive medical treatment would be compensated
<p>EXAMINER'S REPORT</p>
<p>With the exception of part a, candidates performed well on this question. The candidate was expected to be able to evaluate how changes in coverage or the legal system would affect claims based on the history of asbestos litigation. A common error across parts a, b, and d was to provide brief answers that did not describe the effect as asked.</p>
<p>Part a</p> <p>Candidates generally struggled with this part, demonstrating some knowledge about either WC or PL for each segment, but often being unable to compare them. A common error was to discuss the statute of limitations in the section dealing with the length of time between reporting and payment. The statute of limitations would only deal with the length of time between injury and reporting.</p>
<p>Part b</p> <p>Candidates generally did well on this part. One common error was confusing the number of claimants with the number of lawsuits and saying the number of claimants would increase. Another common error was only discussing the frequency or severity changes but not combining those effects to draw a conclusion regarding the total dollars paid to claimants.</p>
<p>Part c</p> <p>Again, candidates generally did well on this part. A common error was confusing medical criteria statutes and statute of limitations or the Daubert decision.</p>
<p>Part d</p> <p>Candidates generally did well on this part. The only common errors occurred when candidates did not understand medical criteria statutes.</p>

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 7	
TOTAL POINT VALUE: 2.5	LEARNING OBJECTIVE: B
SAMPLE ANSWERS	
Part a: 0.5 point	
<p>Sample 1:</p> <ul style="list-style-type: none"> • If it's compulsory, it should be affordable to all • There is a limit on what someone should have to pay for coverage <p>Sample 2:</p> <ul style="list-style-type: none"> • Equal sharing is fairer than based on risk • Risk based pricing may discourage individuals from purchasing insurance, particularly high risk individuals <p>Sample 3:</p> <ul style="list-style-type: none"> • The risk based premium will hurt low and middle income insureds • Socialized insurance costs can encourage some to buy who otherwise wouldn't <p>Sample 4:</p> <ul style="list-style-type: none"> • If insurance is compulsory, it should be affordable • Socialized insurance costs can be more fair than actuarially based rates 	
Part b: 0.5 point	
<p>Sample 1:</p> <ul style="list-style-type: none"> • The coverage is compulsory • There is no competition so insured cannot move to other providers <p>Sample 2:</p> <ul style="list-style-type: none"> • Mandatory coverage – adverse selection is avoided • Insurer is subject to having part of its profits expropriated, allowing government to impose subsidies even in a competitive market <p>Sample 3:</p> <ul style="list-style-type: none"> • Compulsory – thus the low risks cannot opt out • It is believed that the benefit outweighs costs. This makes it easily accepted by the public. 	
Part c: 0.5 point	
<p>Sample 1:</p> <ul style="list-style-type: none"> • It has to exit all lines from the market • It might lose cross marketing opportunities from operating in different markets <p>Sample 2:</p> <ul style="list-style-type: none"> • Lose economies of scale associated with cross marketing • Lose sunk costs from establishing operations in the state <p>Sample 3:</p> <ul style="list-style-type: none"> • Insurer may be forced to exit other lines in the market by regulatory authority. • Insurer may lose ability to cross-sell its products available in other lines 	
Part d: 1 point	
<p>Sample 1:</p> <ul style="list-style-type: none"> • Change marketing strategy to try to attract more lower risk customers • Institute underwriting guidelines to exclude high risks from purchasing policies <p>Sample 2:</p> <ul style="list-style-type: none"> • Careful underwriting - avoid subsidized risks while writing more low risk policies 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

- Marketing - focus marketing on risks that will be profitable

Sample 3:

- Expanding in related lines of business in the state to grow and cross-subsidize the strictly regulated line of business
- Provide higher quality service to differentiate itself from low costs competitors to attract better risks who are more likely to be profitable

Sample 4:

- The insurer could look for ways to reduce operating expenses and thus be able to offer lower rates which will make them more competitive
- Use affinity marketing to attract groups with favorable underwriting profiles

EXAMINER'S REPORT

Generally candidates performed well on parts a-c, while part d was more challenging as candidates were asked to describe two ways to grow a book of business in a state with strict rate regulation.

Part a

Common errors:

- "To make insurance available and affordable" – The statement is true when the coverage is compulsory. If the coverage is voluntary, both the insurer and insured could opt out.
- "It fills needs unmet by private insurance" – This confuses "socialized insurance costs" with social programs.
- "It is fairer" or "It is more efficient" or "It provides a social purpose" – These responses are incomplete; need to show an understanding of how socialized costs were fairer or more efficient or provide a social purpose (see sample answers above).

Part b

Common errors:

- Listing particular government programs instead of features of a market with socialized insurance costs.
- Defining socialized insurance costs rather than describing common features of a socialized market.

Part c

Common error:

- Having to give prior notice to policyholders – This is a requirement for a common non-renewal so it is not a specific cost of exiting a market.

Part d

Common errors:

- Describing the same strategy twice
- Focusing only on growth of a book of business but ignoring the strict constraint of rate regulation as outlined in the question.
- Writing more policies and ceding them to a reinsurer or the residual market – this may grow the direct book but the effect on the net book is unclear.
- Cross marketing to other states – while this would grow the book, the question asks for how to grow within the state that has strict regulation.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 8	
TOTAL POINT VALUE: 3.25	LEARNING OBJECTIVE: B
SAMPLE ANSWERS	
Part a: 2.25 points	
<p>Personal Auto/HO excluded from TRIA (commercial lines only) Coverage deductible = 20% of <u>Direct</u> Earned Premium that company wrote last year =(\$50M + \$100M) * 20% = \$30M</p> <p>Federal government pays 85% of \$170M (\$200M – \$30M Deductible) = \$144.5M Company pays 15% x \$170M + \$30M (Deductible) = \$55.5M</p>	
Part b: 0.5 point	
<ul style="list-style-type: none"> • Industry losses must be greater than \$5M • Certified (or declared an act of terror) by Secretary of Treasury, Secretary of State, and Attorney General 	
Part c: 0.5 point	
<p>Any two of the following:</p> <ul style="list-style-type: none"> • Catastrophic – high severity affecting many people at once • Lack of credible data from which to base accurate premium rates (or the risk can't be effectively modeled, making adequate pricing impossible) • There are not a sufficient # of historical events to accurately anticipate potential claims • Not fortuitous (i.e., it is an intentional act) 	
EXAMINER'S REPORT	
<p>Candidates generally struggled with parts a and b of this question, but performed better on part c. Some candidates did not understand the level of federal involvement, and how coinsurance and deductibles function within the program.</p>	
Part a	
<p>Common errors:</p> <ul style="list-style-type: none"> • Not calculating deductible based on direct commercial line premium only – either the candidate included personal lines, or included assumed amounts • Not understanding the order of calculation between deductible and coinsurance • Using an incorrect deductible amount or coinsurance percentage • Confusing the \$100M minimum loss for federal involvement, and considering it part of an insured's deductible 	
Part b	
<p>Common errors:</p> <ul style="list-style-type: none"> • Confusing \$5M total loss of the event, and \$5M loss of an individual insured • Using other figures as requisite threshold of federal involvement • Listing other government parties as responsible for declaring an act as a terrorist act 	
Part c	
<p>Common error:</p> <ul style="list-style-type: none"> • Confusing two different requirements of insurability into a single, incorrect requirement 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 9	
TOTAL POINT VALUE: 2.25	LEARNING OBJECTIVE: B
SAMPLE ANSWERS	
Part a: 1 point	
<ul style="list-style-type: none"> • Social Security – Not fully funded <ul style="list-style-type: none"> • Future obligations/liabilities outstrip assets • NFIP – Not fully funded <ul style="list-style-type: none"> • Money is owed to Treasury for past catastrophes such as Katrina • Program is in tremendous debt • Rates are inadequate 	
Part b: 0.75 point	
<p>Any three of the following:</p> <ul style="list-style-type: none"> • Program is expected to run indefinitely • Program is mandatory • If necessary, government can tax or borrow • There will always be new entrants to the system • If necessary, government can reduce benefits 	
Part c: 0.5 point	
<p>Any two of the following:</p> <ul style="list-style-type: none"> • Moral hazard and lack of mitigation because people expect government to step in after a catastrophe has occurred • Adverse selection as a result of subsidized rates • Flood maps may not be accurate, making predictability of future loss difficult • Program is not compulsory (lack of participation) • Growing exposure in coastal areas • Rates are not adequate • Large amount of debt owed to treasury that analysts don't think will be repaid within 10 years • Deficit would result in taxpayer burden • Due to climate change, frequency or severity of catastrophic losses may be increasing 	
EXAMINER'S REPORT	
Candidates generally performed well on this question, especially on part b.	
Part a	
<p>Common errors:</p> <ul style="list-style-type: none"> • Using answers appropriate for part b as support in part a. • Not giving a supporting reason for the funding level of the program. • Stating that Social Security did not need to be fully funded. • Listing funding sources for Social Security and NFIP / misinterpreting the question. 	
Part b	
<p>Common errors:</p> <ul style="list-style-type: none"> • Giving overlapping reasons (e.g., "Program to expected to run indefinitely" and "there will always be new entrants into the program", or "government can always tax" and "government can always borrow". 	
Part c	

SAMPLE ANSWERS AND EXAMINER'S REPORT

Common errors:

- Just stating that the program was in debt without qualifying why this might not be acceptable.
- Similarly, stating there were subsidies without qualifying why this might not be acceptable.
- Stating that there is a lot of catastrophe risk without qualification.
- Giving overlapping reasons (e.g., two different ways rates were not adequate)
- Stating that the NFIP cannot borrow more from the Treasury.
- Stating that the NFIP would not be able to pay out quickly enough.
- Stating that the NFIP is not indefinite.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 10	
TOTAL POINT VALUE: 2.5	LEARNING OBJECTIVE: B
SAMPLE ANSWERS	
<ul style="list-style-type: none">• FAIR Plan<ul style="list-style-type: none">○ Ineligible due to vacancy○ Ineligible due to property being and remaining vacant○ This would be ineligible - since the property is vacant, it probably has poor housekeeping and poor maintenance• NFIP<ul style="list-style-type: none">○ Mandatory due to federally backed mortgage on floodplain property○ Required because mortgage is federally backed○ Required/mandatory because federally-backed mortgages for homes in flood plain zones must have flood insurance○ Since it's located in a floodplain and has a mortgage, it will be required to buy flood coverage• Medicare<ul style="list-style-type: none">○ Eligible due to age○ Eligible because the individual is over 65 years old○ Eligible for Medicare coverage because they are over 65. They would receive Part A coverage and choose to pay for Part B.• Social Security<ul style="list-style-type: none">○ Ineligible due to lack of working credits○ Ineligible because this individual never worked, never married, is not disabled○ Would not be eligible since he did not work and pay into the program○ Eligible if the individual had been disabled as a child and would have been covered since then• Windstorm Plan<ul style="list-style-type: none">○ Ineligible due to inland location○ Ineligible due to vacancy○ He would not be eligible for the same reasons as FAIR plan above (poor housekeeping and maintenance)○ No, this property is ineligible since it's located on an inland floodplain and not on the coast	
EXAMINER'S REPORT	
<p>Most candidates performed well. Common errors:</p> <ul style="list-style-type: none">• Some candidates stated that the property would be eligible instead of required to purchase flood coverage.• Some candidates thought that the NFIP requirement was due to being in a floodplain, rather than due to the mortgage requirements.• Medicare and Social Security eligibility was reversed by some candidates.• Some candidates listed lack of working credits as a reason for ineligibility for Medicare, but there is no working requirement for Medicare.• Some candidates left out the individual's age as the reason for Medicare eligibility.• Some candidates incorrectly answered that the individual is eligible for Social Security as it provides a minimum benefit or safety net in retirement for all people regardless of work	

SAMPLE ANSWERS AND EXAMINER'S REPORT

experience

- Some candidates listed windstorm as eligible since there was minimal risk of windstorm. While it is true that the property may be able to get insurance in the voluntary market, windstorm plans are only available in certain states and in coastal regions, which would not apply to this inland property.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 11	
TOTAL POINT VALUE: 2.5	LEARNING OBJECTIVE: C1
SAMPLE ANSWERS	
Part a: 0.5 point	
Unmet need for Regulator: <ul style="list-style-type: none">• Need to determine if premium rates by LOB are inadequate or excessive• Surplus by LOB to evaluate solvency at the individual line level• Need to understand qualitative data such as quality of management or management's business plan• Evaluation of company's market conduct and/or trade practices	
Unmet need for Company Management: <ul style="list-style-type: none">• Need to determine which lines of business / segments / regions of the company are profitable• Capital allocation by LOB to evaluate risk-adjusted performance• Income Statement is on a SAP basis. Management may want to see data on a GAAP basis to better evaluate the company as a going concern• There is a mismatch between premiums and losses in the Income Statement. Management may want to see accident year data to better evaluate loss exposure.• Management may want to view results using discounted reserves to get a better measure of profit.• Split LAE into DCC and A&O to see where expenses are coming from• Need to understand how legal changes in the market may affect the company• Need to assess future profitability, not just today's profitability	
Unmet need for either Regulator or Management (acceptable for either): <ul style="list-style-type: none">• Need to calculate IRIS ratios / RBC to evaluate solvency risk• Premium by LOB to watch for any lines that have abnormally high premium growth• Need to assess collectability of reinsurance• Need details on assets/investments to evaluate quality of assets/investments• Need to know if reserves are adequate and do not have a high risk of adverse development• Need to evaluate liquidity risk by seeing size/type of unrealized gains• Need to know income by line of business	
Part b: 0.5 point	
Any two of the following: <ul style="list-style-type: none">• IEE includes expenses by LOB• IEE further allocates underwriting expenses into three components: 1. Acquisition, field supervision and collection expenses, 2. General expenses, 3. Taxes, licenses and fees• U&IE has total expense PAID calculated (Paid, unpaid, & incurred amounts), IEE has incurred figures only• U&IE is to the dollar, IEE is in thousands• IEE has direct and net breakouts, U&IE only has net• IEE shows dollars and percentages, U&IE only shows dollars• U&IE only allocates LAE reserve to line, while IEE allocates all expenses to line	

SAMPLE ANSWERS AND EXAMINER'S REPORT

- U&IE has Reinsurance assumed divided between property, liability, and financial lines
- IEE has the following lines broken down into components: Allied lines, CMP, Auto physical damage
- U&IE has Medical Professional liability and/or product liability broken up between Occurrence & claims made
- IEE breaks LAE into DCC & A&O, U&IE does not

Part c: 0.5 point

For excluding:

- Unrealized capital gains are excluded because they are a direct credit or charge to surplus and don't flow through the income statement. Consistent with Statement of Income.
- Unrealized gains can be volatile/uncertain – including would increase the variability/uncertainty of income
- Unrealized gains may not be readily available since the assets must be sold first
- Not appropriate for bonds. Any price changes are not meaningful if the company intends to hold to maturity.

For including:

- The inclusion of only realized capital gains in investment income often distorts profitability measurements that are motivated by taxes and cash needs.
- Including unrealized gains would provide a more complete picture of investment performance / profitability
- The assets will be sold eventually, so including them would be closer to the “going concern” view of GAAP, and more realistic.
- If they are not included, it can be difficult to compare investment results of different companies. Most non-insurance companies are on a GAAP basis.

Part d: 1 point

Difference 1:

- The IEE uses a retrospective method
- Ratemaking methods are prospective

Difference 2:

- The IEE allocates surplus by loss reserves, unearned premium reserves, and earned premium for each line of business / IEE allocates by formula
- Ratemaking may use different allocation methods to better allocate surplus to inherent risk of the line, such as accounting for catastrophe exposure in homeowners insurance

Difference 3:

- NAIC prescribes to what line of business surplus should be allocated to on a companywide basis
- Ratemaking may allocate surplus to either more granular levels or broader levels, such as by coverage (example: liability and physical damage separate), or by state or geography

Difference 4:

- NAIC allocates all actual surplus to lines of business
- The summation of the allocated surplus may not equal the total surplus in

SAMPLE ANSWERS AND EXAMINER'S REPORT

ratemaking
EXAMINER'S REPORT
Part a
<p>Candidates generally performed well on this part, as they could draw upon any need by regulators or company management that couldn't be derived from the Statement of Income. Common errors:</p> <ul style="list-style-type: none">• Listing an item not found on the Statement of Income with no description of the need by the various stakeholders• Stating that policyholder surplus is not found on the Statement of Income• Stating that a stakeholder needs to look at historical changes over past years – but the Income Statement already provides this info (has both current and prior year information, and multiple Income Statements could be used for a more extensive history)
Part b
<p>In general candidates struggled to provide two differences. Common errors:</p> <ul style="list-style-type: none">• Listing difference for items other than expenses• Not giving enough detail on differences. Merely stating that the breakouts for expenses are different between the two was not sufficient.• Stating that one of the exhibits has a breakout by state (neither does)• Stating that one of the exhibits list expense by category and the other does not (both do)
Part c
<p>This part was more challenging, but many candidates were able to successfully synthesize information from various parts of the syllabus to develop one argument for and one argument against excluding unrealized capital gains. Common errors:</p> <ul style="list-style-type: none">• Stating that unrealized gains should be included because they are in surplus.• Being too general, e.g., "Unrealized gains should not be included because they are not realized."• Unrealized gains are difficult to allocate, so they should be excluded (realized gains are an artificial allocation as well)
Part d
<p>The question has the keyword "describe", and is worth 1.0 for two differences. Therefore, for each difference the candidate must present information on both allocation methods to receive full credit. Candidates generally excelled on the NAIC/IEE allocation method and struggled on the ratemaking allocation of surplus. For the ratemaking allocation, candidates needed to demonstrate that they understood that surplus allocation is based on risk. Common errors:</p> <ul style="list-style-type: none">• Only describing what one method does without describing the other, for example, "ratemaking considers the inherent risk of each LOB while the IEE does not"• For Ratemaking, being too vague, not talking about risk and only providing one example of what ratemaking would consider

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION: 12	
TOTAL POINT VALUE: 6	LEARNING OBJECTIVE: C1, C2
SAMPLE ANSWERS	
Part a: 3 points	
<p>Sample 1:</p> <p>Current year surplus = prior year surplus + net income + change in unrealized capital gains - change in non-admitted assets</p> <p>Earned premium = WP - Δ UEPR = 300,000 - (186,000 - 31,200) = 145,200</p> <p>Incurred loss = paid loss + Δ reserves = 64,000 + (89,000 - 59,600) = 93,400</p> <p>Incurred LAE = paid LAE + Δ LAE reserves = 17,500 + (32,200 - 11,100) = 38,600</p> <p>Other U/W expenses = 35,400 + (1,500 - 600) = 36,300</p> <p>Net income = EP - incurred loss - incurred LAE - incurred other U/W expenses - investment expenses incurred + gross investment income earned + realized capital gain = 145,200 - 93,400 - 38,600 - 36,300 - 10 + 4,270 + 3,400 = -15,440</p> <p>*assume gross investment income does not already include capital gains</p> <p>CY surplus = 80,400 + (-15,440) + (-4,600) - (900 - 700) = 60,160</p> <p>Sample 2:</p> <p>80400 + 300000 - (186000 - 31200) - 64000 - (89000 - 59600) - 17500 - (32200 - 11100) - 35400 - (1500 - 600) - 10 + 4270 + 3400 - 4600 - (900 - 700) = 60160</p>	
Part b: 2.25 points	
<p>Sample 1:</p> <p>Let Quota Share = x</p> <p>IRIS Ratio 2 = $300000(1-x) / [80400 + 32\% * 300000 * x] = 300\%$</p> <p>X = 10% Quota Share</p> <p>IRIS Ratio 4 = $186000 * 32\% * 10\% / [80400 + 32\% * 10\% * 300000] = 6.6\% < 15\%$</p> <p>In normal range, no response by regulator</p> <p>Sample 2:</p> <p>Ceding Commission = 32%</p> <p>Ratio 2: 300%</p> <p>NWP/PHS = 300%</p> <p>X = ceded premium; 32% * x = commission</p> <p>PHS = 80,400 + 32% * x</p> <p>NWP = 300k - x</p> <p>NWP/PHS = $(300k - x) / (80.4k + 32\% * x) = 3$</p> <p>300k - x = 241.2k + .96x</p> <p>58.8k = 1.96x</p> <p>X = 30k</p> <p>Ceded WP 30k PHS = 90 = 80.4 + .32 * 30</p> <p>Commission ratio = 32%</p> <p>Ceded UEPR = 30k / 300k * 186k = 18.6</p> <p>Surplus aid = 32% * 18.6 = 5,952</p> <p>Ratio 4 = 5.952 / 90 = 6.613%</p>	

SAMPLE ANSWERS AND EXAMINER'S REPORT

Ratio 4 is 6.6%, less than 15%, well within reasonable limits. The regulator will not be worried about surplus aid.

Part c: 0.75 point

Sample 1:

Reinsurance Assumed & Ceded need disclosed ceded premium reserve & contingent commission.

Sample 2:

"Reinsurance Assumed & Ceded" have to give figures on the unearned premium & ceded commission refunded if the reinsurance contract was cancelled.

Sample 3:

Reinsurance Recoverable for Unsecured Reinsurer. Since no info show this reinsurer has provided any security, if total reinsurance recoverable from this reinsurer is >3% of surplus, additional disclosure required.

Sample 4:

If disputed reinsurance recoverable was >5% of surplus from one entity and >10% of surplus from all entities, they should have disclosed amount in dispute.

EXAMINER'S REPORT

Part a

The most common errors were to include the prior year's change in unrealized capital gains (7,900), to not include the prior year's unpaid underwriting expenses (600), or to include the prior year's realized capital gains (1,830).

Part b

Most candidates did well on the part of the question dealing with the IRIS 2 ratio, with the most common error coming from using the surplus they calculated in part a instead of 80,400. More candidates had difficulty with the IRIS 4 ratio, especially with knowing the formula for surplus aid and including the correct PHS. Common errors with the surplus aid included using the WP (300,000) instead of the UEP (186,000) and not applying both the 10% ceding ratio and the 32% ceding commission. Candidates also did not update the PHS to include the 9600 in surplus growth. Most knew the 15% threshold to pass the IRIS 4 test and most had appropriate responses/actions by the regulator.

Part c

Candidates were least successful on this part. Many candidates gave answers related to Schedule F, not the Notes to the Financial Statements. Others described the disclosure but did not identify which Note it came from.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 13				
TOTAL POINT VALUE: 4			LEARNING OBJECTIVE: C1	
SAMPLE ANSWERS				
Sample 1:				
#1.) Unpaid at 12/31/12 = 2012 Part 2 Cumul. Incurred - 2012 Part 3 Cumul. Paid				
<u>Year</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	
Prior	350-0=350	650-500=150	655-555=100	
2011	XXX	800-100=700	900-700=200	
2012	XXX	XXX	710-75=635	
#2.) Unpaid at 12/31/13				
<u>Year</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	
Prior	150+700=850	100+200=300	15+25=40	
2012	XXX	635	215	
2013	XXX	XXX	725	
- 2012 and prior from #1				
- 2013 from CY2013 paid and unpaid (3rd tbl in question)				
#3.) 2013 Part 3 Cumulative Paid (at 12/31/13)				
<u>Year</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	
Prior	0	555-500+700-100=655	655+20+240=915	
2012	XXX	75	75+435=510	
2013	XXX	XXX	95	
- 2012 and prior cols: from 2012 Part 3				
- 2013 col: add CY2013 paid				
#4.) 2013 Part 2 Cumulative Incurred = #2 + #3				
<u>Year</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	
Prior	850+0=850	300+655=955	40+915=955	
2012	XXX	635+75=710	215+510=725	
2013	XXX	XXX	725+95=820	
Sample 2:				
	<u>Year</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
	Prior	A	B	C
	2012	XXX	D	E
	2013	XXX	XXX	F
	A = (650 + 800) - (500 + 100) = 850			
	B = (655 + 900) - (500 + 100) = 955			
	C = (555 + 700) - (500 + 100) + 20 + 240 + 15 + 25 = 955			
	D = 710			
	E = 75 + 435 + 215 = 725			
	F = 725 + 95 = 820			

SAMPLE ANSWERS AND EXAMINER'S REPORT

Sample 3:

	<u>2011</u>	<u>2012</u>	<u>2013</u>
Prior	$650 + 800 - 500 - 100$ = 850	$850 + 655 + 900 - 650 - 800$ = 955	$955 + 20 + 240 + 15 + 25$ - (655 - 555 + 900 - 700) = 955
2012		2012 Incurred = 710	$710 + 435 + 215 - (710 - 75)$ = 725
2013			$95 + 725$ = 820

Sample 4:

<u>A = Year End Reserves</u>				<u>C = A + B</u>			
<u>Year</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>Year</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Old Prior	$650 - 500 =$ 150	$655 - 555 =$ 100	15	Old Prior	650	655	590
2011	$800 - 100 =$ 700	$900 - 700 =$ 200	25	2011	800	900	965
2012	XXX	$710 - 75$ = 635	215	2012	XXX	710	725
2013	XXX	XXX	725	2013	XXX	XXX	820

<u>B = Cumulative Paid</u>				<u>2013 Part 2J</u>			
<u>Year</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>Year</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Old Prior	500	555	$555 + 20$ = 575	Prior	$650 + 800 -$ (500 + 100) = 850	$655 + 900 -$ (500 + 100) = 955	$590 + 965 -$ (500 + 100) = 955
2011	100	700	$700 + 240$ = 940	2012	XXX	710	725
2012	XXX	75	$75 + 435$ = 510	2013	XXX	XXX	820
2013	XXX	XXX	95				

EXAMINER'S REPORT

Many candidates successfully demonstrated their understanding of Schedule P. Most of the calculations are relatively straightforward if using a triangular, stepwise method. However, there are a variety of ways to calculate the solution and many candidates were able to obtain the final answer by combining multiple steps into fewer calculations. Common errors included:

- Not collapsing the 2011 row into the prior row in the solution
- Leaving the 2010 column in the solution
- Adding incremental paid instead of cumulative paid to the unpaid at 12/31/2013 to calculate the cumulative incurred at 12/31/2013

SAMPLE ANSWERS AND EXAMINER'S REPORT

- Calculating incurred at 12/31/2013 as incurred at 12/31/2012 plus paid amounts
- Calculating incurred at 12/31/2013 as incurred at 12/31/2012 plus unpaid at 12/31/2013

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 14	
TOTAL POINT VALUE: 2	LEARNING OBJECTIVE: C1
SAMPLE ANSWERS	
Part a: 1 point	
<ul style="list-style-type: none">• Event i = Recognized Subsequent Event (Type 1) - loss occurred prior to the Financial statement as of date and that new information was received after that date• Event ii = Non Recognized Subsequent Event (Type 2) - loss occurred after the financial statement as of date and also include one of the following items:<ul style="list-style-type: none">○ The event was material○ The event occurred/known prior to Financial Statement publish date	
Part b: 1 point	
<ul style="list-style-type: none">• Event i - the financial statement already reflected the event because the financial statement should reflect all known information up to the date it is published.• Event i - the financial statement needed to be updated • Event i - a disclosure was not required• Event i - a disclosure may be required to prevent the statement from being misleading. • Event ii - the financial statements should not be updated and a disclosure is required.	
EXAMINER'S REPORT	
Part a	
Most candidates were able to define the two types of Subsequent Events and match the two example events to the correct Subsequent Event Type. Common errors included not providing the correct description of the event types as shown in the sample answer, or thinking that subsequent events applied to events after the statement was published.	
Part b	
Most candidates performed well on this part, especially for event ii. The most common error was stating that event i did not require an update to the financial statements because it was already reflected, immaterial, or that the additional information came in after the 12/31 cutoff date.	

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 15		
TOTAL POINT VALUE: 6		LEARNING OBJECTIVE: C1
SAMPLE ANSWERS		
<u>Surplus (000s)</u>		
Admitted Assets – Liabilities = 61,900 – 51,740 = 10,160		
<u>Admitted Assets (000s)</u>		
Agents' Balances	1,000	Only less than 90 days past due admitted
Bonds 1 & 2	45,000	Amortized cost
Bonds 3+	10,000	Fair value
Cash	500	
Goodwill	0	Fully amortized
Deferred acquisition cost	0	Non-admitted asset
Reinsurance Recoverable	4,150	Paid loss recoverable (3,700 + 150 + 250 + 50)
<u>Net Deferred Tax Asset (DTA)</u>	<u>1,250</u>	DTA less Deferred Tax Liability (DTL) (1,900 – 650)
Total Assets	61,900	
<u>Liabilities (000s)</u>		
Loss Reserves	31,500	Schedule P unpaid less unpaid recoverable (19K + 20K – 7.5K)
LAE Reserves	10,000	Schedule P unpaid less unpaid recoverable (3.5K + 4K + 2.5K)
High Deductible Unpaid	0	Recorded net of the deductible
Unearned Premium	10,000	Gross unearned less ceded (12K – 2K)
Funds Held	180	
<u>Provision for Reinsurance</u>	<u>60</u>	
Total Liabilities	51,740	
<u>Provision for Reinsurance</u>		
Identify as non-slow-paying reinsurer: $250 / (3,700 + 250 + 0) = 6.3\%$ which is less than 20%		
Provision for authorized non-slow-paying reinsurer = $20\% \times$ Amounts greater than 90 days past due = $20\% \times (250 + 50) = 60$		
EXAMINER'S REPORT		
This question focused on connecting Schedule P and Schedule F to the balance sheet as well as grasping GAAP vs. SAP concepts. In general, candidates displayed an understanding of the majority of topics. However, there was a clear distinction between those who fully understood the balance sheet and those who only knew the basics.		
Common errors for the authorized reinsurance contract: ignoring the provision for reinsurance (or not getting the correct formula), ignoring the funds held (or considering it an addition to surplus), and not including the paid loss recoverable as an addition to surplus. Some candidates incorrectly		

SAMPLE ANSWERS AND EXAMINER'S REPORT

claimed a portion of the paid loss recoverable as a non-admitted asset, but that duplicates the purpose of the provision for reinsurance.

Common errors for the unpaid loss & LAE material: including the payments for loss, DCC, and/or A&O as part of the reserve for unpaid losses and LAE, not tying schedule P losses with the reinsurance contract to obtain the ceded loss reserves, or struggling with the treatment of the unpaid losses beneath high dollar deductible, which has no impact on the surplus. Some candidates accrued a non-admitted asset, however this asset should only be considered for paid losses that have not been recovered.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 16

TOTAL POINT VALUE: 2.75

LEARNING OBJECTIVE: C4

SAMPLE ANSWERS

Sample 1:

AY	% pd	incr pd %	% unpaid	% unpd disc	% disc
01	100	0	0		
02	100	0	0		
03	100	0	0		
04	100	0	0		
05	100	5	0		
06	95	5	5	4.836	0.9671
07	90	10	10	9.351	0.9351
08	80	15	20	18.407	0.9203
09	65	25	35	31.705	0.9059
10	40	40	60	53.798	0.8966

Yes they should elect to use their own payment patterns since they are expected to remain stable over the next 5 years and because the payments are paid out completely in year 6. Most likely the US treasury's payout pattern does not align with this so it won't be as accurate. Furthermore, using the industry's payout pattern would decrease discounted loss reserves which will increase taxable income which will increase tax. The company would not want this.

Sample 2:

(same calculations as above)

Using company specific payment pattern, the discount factor for reserves will be higher due to the faster payment pattern of the company compared to that calculated by the US treasury. This will result in higher losses (due to less discounting) which will result in lower income taxes. Thus the company should elect to use their own payment pattern if this is expected to remain stable.

EXAMINER'S REPORT

Many candidates successfully performed this calculation to determine the loss reserve discount given a payment pattern. Common errors included:

- Failing to state that using the company payment pattern was valid because it would be stable for the next 5 years
- Starting the discounting calculation using the latest AY instead of the one prior
- Missing the last incremental paid calculation
- Basing all calculations off the incorrect year
- Neglecting to divide final discounted unpaid amount by the undiscounted unpaid amount

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 17	
TOTAL POINT VALUE: 2.25	LEARNING OBJECTIVE: C2
SAMPLE ANSWERS	
Part a: 0.75 point	
<p>Sample 1:</p> <p>IRIS #1: $GWP/PHS = (700+15+18)/80 = 9.1625$</p> <p>IRIS #2: $NWP/PHS = 200/80 = 2.5$</p> <p>IRIS #3: $\text{Change in NWP/Prior NWP} = (200-350)/350 = -42.9\%$</p> <p>Sample 2:</p> <p>IRIS #1: $GWP/PHS = (700+15+18)/80 = 916.25\%$</p> <p>IRIS #2: $NWP/PHS = 200/80 = 250\%$</p> <p>IRIS #3: $\text{Change in NWP/Prior NWP} = (200-350)/350 = -42.86\%$</p> <p>Sample 3:</p> <p>1) $(700+15+18)/80 = 916\%$</p> <p>2) $200/80 = 250\%$</p> <p>3) $(200-350)/350 = -43\%$</p>	
Part b: 0.5 point	
<p>Sample 1:</p> <ul style="list-style-type: none"> -Profitability: Review IRIS ratio 5 to see if insurer is profitable, unlikely to be as much a concern -Portfolio Mix: Look at lines written (long-tail vs short-tail) and and/or catastrophe prone lines. Higher IRIS ratios on short-tail lines and non-catastrophe lines might be more acceptable. <p>Sample 2:</p> <ul style="list-style-type: none"> -The amount of direct vs assumed business – more control over direct -Check IRIS ratios 11-13 to check insurer's reserve adequacy and look into whether the insurer is using cash flow underwriting to cover prior liabilities. <p>Sample 3:</p> <ul style="list-style-type: none"> -Review IRIS 2 to make sure disparity between ratios not too small (Lack of Reinsurance) -Review IRIS 4 ratio (Surplus Aid) to see if IRIS 1 needs to be recalculated adjusting for excessive surplus aid. 	
Part c: 0.5 point	
<p>Sample 1:</p> <ul style="list-style-type: none"> -Reserve Adequacy – If reserves are adequate, not as concerned -Profitability – If insurer is profitable, not as concerned <p>Sample 2:</p> <ul style="list-style-type: none"> -Check to make sure reinsurance is adequate and collectible. -To check insurer's surplus and determine whether it relies too heavily on surplus relief. <p>Sample 3:</p> <ul style="list-style-type: none"> -Look at the mix of business for the company. If have long tailed lines, should keep a lower ratio since harder to predict and reserve for. -The amount of direct vs assumed business – more control over direct. 	
Part d: 0.5 point	
<p>Sample 1:</p> <ul style="list-style-type: none"> -Look at IRIS 2. Large growth or change in NWP may not be a concern if ratio to PHS is in 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

line.

-Also look at reserve adequacy to make sure reserves are currently adequate. i.e., ratios 11-13

Sample 2:

-Look at the profitability of the company, if the company is profitable may be able to sustain a higher ratio.

-Look for a stable mix of business for the company. If have long tailed lines, should keep a lower ratio since harder to predict and reserve for.

Sample 3:

-To check insurer's surplus and determine whether it relies too heavily on surplus relief.

-Did insurer recently enter/exit new LOB or territory? Would cause an abrupt premium change and may not be a cause for concern.

Sample 4:

-Is there a drastic change caused by new reinsurance agreements?

-Does the company have prior experience in this line? Where are they growing? Prior experience = less likely to experience solvency issues.

Sample 5:

-Could compare to the change in PHS ratio to see if surplus is changing in same or opposite direction as NWP. Premium growth with surplus drops is a bad sign.

-Are there adequate pricing terms/conditions?

EXAMINER'S REPORT

Part a

Most candidates were able to calculate IRIS ratios 1-3, given the relevant financial information. The most common error was excluding Reinsurance Assumed from the calculation of IRIS ratio 1.

Part b

Most candidates were able to briefly describe two other considerations when reviewing IRIS ratio 1. The most common error was stating the threshold values for the ratio as an additional consideration.

Part c

Most candidates were able to briefly describe two other considerations when reviewing IRIS ratio 2. The most common error was stating the threshold values for the ratio as an additional consideration.

Part d

Most candidates were able to briefly describe two other considerations when reviewing IRIS ratio 3. The most common error was stating the threshold values for the ratio as an additional consideration.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 18	
TOTAL POINT VALUE: 4.5	LEARNING OBJECTIVE: C2
SAMPLE ANSWERS	
Part a: 3.5 points	
<p>Sample 1:</p> $\text{WC Base} = 8200 * ((.5)(1.018)(1 + 1.043/0.982)*0.817 + 0.335 - 1) = 1578.8$ $\text{LSD} = 1578.8 * ((0.114)(0.3) + (0.035)(0.15)) = 62.28$ $\text{PCF} = (15000/(15000+6900+8200))*0.3 + 0.7 = 0.85$ $\text{WP RBC} = [570000 + 84380 + (1578.8 - 62.28)]*0.85 + 20462 = 577,647$ $\text{RBC} = 2.4\text{M} + \sqrt{1.3^2 + 2.9^2 + 1.8^2 + 7.3^2 + 0.577647^2} = 10,583,134$	
<p>Sample 2:</p> $\text{WC R5} = 8200 * ((1/2) (1 + 1.043/0.982) (1.018) *0.817 + 0.335 - 1) = 1578.8$ $\text{LS Discount} = 1578.81 * (1 - 0.114*0.3 - 0.035*0.15) = 1516.53$ $\text{PCF} = 0.7 + 0.3 * (15000/(15000+6900+8200)) = 0.8495$ $\text{R5} = 0.8495 * (570000 + 84380 + 1,516,530) + 20462 = 1,864,650$ $\text{RBC} = 2.4\text{M} + \sqrt{1.3^2 + 2.9^2 + 1.8^2 + 7.3^2 + 1.864650^2} = 10.77\text{M}$	
<p>Sample 3:</p> $\text{R5} = (1.043*1.018/0.982 + 1.018) * 50%*0.817 + 0.335 - 1 = 0.1925 * 8200 = 1,578,812$ $0.3 * 0.114 + 0.15 * 0.035 = 3.945\% \rightarrow 1,516,528$ $+ 520,000,000$ $+ \underline{84,380,000}$ $655,896,528 * \left(\frac{15}{30.1} * 0.3 + 0.7\right) = 557,185,190$ $\underline{\quad\quad\quad + 20,462}$ $\text{R5} = 557,205,652$	
$\text{RBC} = R_0 + \sqrt{R_1^2 + R_2^2 + R_3^2 + R_4^2 + R_5^2} = 559,665,438$	
Part b: 0.5 point	
<ul style="list-style-type: none"> • Use less conservative reserving methods/assumptions to book lower reserves • Use tabular discounting on reserves to increase surplus • Change from non-tabular discounting to tabular discounting • Refine reserving practices to avoid over-reserving • Addition of loss-sensitive reinsurance (increase reinsurance offset) • Addition of retro-rated reinsurance (increase reinsurance offset) • Change from gross of salvage and subrogation to net of salvage and subrogation 	
Part c: 0.5 point	
<ul style="list-style-type: none"> • RBC is somewhat arbitrary and was intended to be a measure of minimum capital requirements. It does not factor in all risks, such as catastrophe risk and interest rate risk. • There are many financial risks that RBC does not consider, including catastrophe risk, interest rate risk, quality of business written, quality of reinsurance. • RBC does not include risk that reserves are currently inadequate, which is a historically significant risk. RBC does not distinguish reinsurers by relative collectability and may not detect significant reinsurer credit risk. • It does not consider all risks, such as the risk from interest rate risk, asbestos risk, 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

catastrophe risk.

- RBC is the minimum level a company should hold. Also, factors used are industry factors, so they are for average companies – if a company is unique then the factors used in calculating RBC are inappropriate.
- Methodology is formulaic & standardized, so it will not pick up on individual risks of a particular company, such as quality of reinsurer.

EXAMINER'S REPORT

Part a

Graders recognized the confusion surrounding the labeling of “Net Written Premium RBC after discount in \$000s”. Credit was awarded to candidates regardless of the order of magnitude used throughout the calculation. Graders also recognized the comma error in Policyholder’s Surplus. This number was not utilized in the answer, and it did not affect results.

Candidates performed well on this problem. Common errors included:

- Utilizing the Inverse of the Ratio of Company Loss & LAE Ratio to Industry
- Confusing Industry Average Loss & LAE Ratio for past 10 years with Industry Loss & LAE Ratio
- Multiplying Adjustment for Investment Income by Underwriting Expense Ratio in calculation of Base Loss & LAE Premium RBC Charge
- Not subtracting ‘1’ in the Base Loss & LAE Premium RBC Charge formula
- Not calculating Loss Sensitive Discount
- Applying Loss Sensitive Factor to All Lines
- Applying Loss Sensitive Factor to Net Written Premium
- Not distinguishing between direct loss sensitive and assumed loss sensitive
- Utilizing GL or WC premium distribution in Premium Concentration Factor calculation
- Utilizing $.3+.7*.5$ in the Premium Concentration Factor calculation
- Applying Premium Concentration Factor to only WC
- Applying Premium Concentration Factor to Excess Charge
- Not considering Premium Concentration Factor
- Not adding Excess Charge to R_5
- Adding Excess Charge to R_4

Part b

In general candidates struggled to provide two different reserving practices that would affect the components. Common errors included identifying solutions which were not reserving practices, or stating the same solution twice.

Part c

Candidates performed very well on this part and demonstrated an understanding of the shortcomings of RBC since the texts focus on the calculation and provide commentary on other metrics to be used in conjunction with RBC. A common error was stating that RBC is not failsafe because it must be used with other metrics to evaluate financial impairment. This is not a reason why RBC has shortcomings, but rather a good practice because it has shortcomings.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 19	
TOTAL POINT VALUE: 3.25	LEARNING OBJECTIVE: C3
SAMPLE ANSWERS	
Part a: 1.25 points	
Sample 1: Statutory Surplus + Provision for Reinsurance + DAC Asset = GAAP-Adjusted Surplus $122,000,000 + 1,300,000 + 18,000,000 = 141,300,000$	
Sample 2: Assuming management's best estimate of uncollectible reinsurance is equal to the provision for reinsurance, Statutory Surplus + DAC Asset = GAAP-Adjusted Surplus $122,000,000 + 18,000,000 = 140,000,000$	
Part b: 2 points	
<u>Structured Settlements:</u>	
SAP:	
<ul style="list-style-type: none">• When a full release is signed by the claimant upon agreement to settle for the future annuity payments, the purchase price of the annuity is recorded as a paid loss and the claim is closed.• When a full release is not provided to the insurance company by the claimant, accounting under SAP is the same as when a full release is obtained, but requires that the insurance company disclose the amount of these contingent liabilities in the Notes to Financial Statements• When the reporting entity is the owner and payee, no reduction shall be made to loss reserves. The annuity shall be recorded at its present value and reported as an other than invested asset.• When the claimant is the payee, loss reserves shall be reduced to the extent that the annuity provides for funding of future payments. The cost of the annuities shall be recorded as paid losses.	
GAAP:	
<ul style="list-style-type: none">• When a full release is signed by the claimant upon agreement to settle for the future annuity payments, the purchase price of the annuity is recorded as a paid loss and the claim is closed.• When a full release is not provided to the insurance company by the claimant, GAAP treats the structured settlement like a reinsurance contract, thus retaining the loss reserve and establishing an equivalent reinsurance recoverable.	
<u>Discounting of Loss Reserves:</u>	
SAP:	
<ul style="list-style-type: none">• With the exception of fixed and reasonably determinable payments such as those emanating from workers' compensation tabular indemnity reserves and long-term disability claims, property and casualty loss reserves shall not be discounted.• Non-tabular discounting is less common than tabular discounting and is typically only done in specific cases where a company has been permitted by its state regulator.• For those reserves that are tabular based, most state regulations are silent on the permitted discount rate, but typically 3.5% per annum is used. For non-tabular reserves the discount rate should be determined in accordance with Actuarial Standards of Practice	

SAMPLE ANSWERS AND EXAMINER'S REPORT

20, but capped at the lesser of: 1) the company's net rate of return on statutory invested assets minus 1.5%, 2) the current yield to maturity on a US Treasury debt instrument with a duration that is consistent to the payment of the claims.

GAAP:

- With the exception of fixed and reasonably determinable payments such as those emanating from workers' compensation tabular indemnity reserves and long-term disability claims, property and casualty loss reserves shall not be discounted.
- GAAP indicated that it is permissible to apply the same discount calculated under SAP for US GAAP purposes. It also indicates that an alternate discount rate could be used, as long as the alternative rate "is reasonable on the facts and circumstances applicable to the registrant at the times the claims are settled."

Retroactive Reinsurance

SAP:

- SAP requires that undiscounted ceded reserves be recorded as a negative write-in liability.
- Any gain to the ceding company (excess of the negative write-in liability over the consideration paid for the reinsurance) is treated as a write-in gain in other income and restricted as special surplus until the actual paid reinsurance recovery is in excess of the consideration paid.

GAAP:

- GAAP requires ceded reserves to be recorded as a reinsurance asset.
- Any gain is deferred, thereby resulting in no immediate income or surplus benefit.

Deferred Tax Assets

SAP:

- Under SAP there is a strict admissibility test for all DTAs.
- Only a portion of the SAP DTA is admitted, and calculated as the amount of DTA expected to reverse in the forthcoming year, plus the amount of DTA expected to reverse during a forthcoming period (beyond the initial year) limited to a percentage of surplus, plus the amount of DTA that can be offset against existing DTLs.

GAAP:

- Under GAAP DTAs are fully recognized.
- A valuation allowance is established if, based on the weight of evidence, it is more likely than not that the DTAs will not be realized.
- GAAP established a hierarchy of evidence to be considered when evaluating DTAs; this is a subjective determination requiring management to use significant judgment.

EXAMINER'S REPORT

Part a

Candidates generally performed well on this calculation. Common errors included:

- Adjusting for reserves to some degree (loss and unearned premium reserves (both ceded and gross) should not be included in the calculation because the differing accounting treatments have no net balance sheet impact)
- Not adding the deferred acquisition cost asset to the SAP policyholder surplus
- Adjusting the DAC asset for a premium deficiency reserve; however, a premium deficiency reserve could not be calculated from the data provided

SAMPLE ANSWERS AND EXAMINER'S REPORT

- Subtracting the provision for reinsurance (this is a SAP liability, and should be added back to arrive at GAAP-adjusted surplus)

Part b

Many candidates were able to demonstrate their knowledge of the differing accounting treatments of the four items listed, particularly from a SAP perspective. Common errors included:

- Structured settlements: failing to note that the signing of a release impacts the accounting treatment under GAAP and SAP
- Loss reserve discounting: stating that GAAP simply allows discounting with no limitations
- Deferred tax assets: confusing the DAC asset with DTAs, and assuming that under SAP DTAs are admitted for only the amount expected to reverse in the next year, when in fact the evaluation period can go beyond one year

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 20	
TOTAL POINT VALUE: 3	LEARNING OBJECTIVE: D
SAMPLE ANSWERS	
Part a: 1 point	
Situation 1 – reasonable opinion Situation 2 – (i) no opinion; OR (ii) qualified opinion Situation 3 – qualified opinion Situation 4 – excessive opinion; redundant opinion	
Part b: 1 point	
Situation 1 – booked reserves are within the actuary's reasonable range Situation 2 – (i) no opinion: lack of data OR actuary could not assess reasonableness, perform analysis; OR (ii) qualified opinion: a piece can't be estimated due to lack of data Situation 3 – actuary is only able to opine on a portion of reserves (property) OR workers compensation is excluded from the analysis Situation 4 – booked reserves are above the high end of the actuary's reasonable range	
Part c: 1 point	
Situation 1 – no additional disclosures OR none OR omitted Situation 2 – (i) if no opinion, disclose the reason for no opinion is the lack of data due to the fire; OR (ii) if qualified opinion, disclose the amount of qualified reserves and the reason for the qualification Situation 3 – disclose the amount of the qualified reserves (\$40M) and the reason for the qualification Situation 4 – disclose the amount of the redundancy OR disclose the maximum amount the actuary believes is reasonable	
EXAMINER'S REPORT	
Candidates generally performed very well on this question. Candidates had the most difficulty on part c by not listing the appropriate disclosures for a qualified opinion.	
Part a	
Common errors included listing an unacceptable type of opinion like adequate opinion, unqualified opinion, none, or over-reserved.	
Part b	
Common errors: <ul style="list-style-type: none"> • Situation 2 – identifying the fire as a subsequent type II event; no (claim) data on the fire loss (misunderstanding it was a fire claim rather than a fire in the data center) • Situation 3 – not indicating workers compensation was excluded; mentioning relied on another actuary's work 	
Part c	
Common errors: <ul style="list-style-type: none"> • All Situations – listing general disclosures; some candidates listed disclosures but did not indicate to which situation they applied • Situation 1 – risk of material adverse deviation • Situation 2 – identifying the fire as a subsequent type II event • Situation 3 – not providing the amount of the qualified reserves; not providing the reason for the qualification; disclosing the actuary relied upon the work of another actuary for workers compensation 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

- Situation 4 – not providing the amount of the redundancy; providing the wrong amount of redundancy (i.e., difference between carried and point estimate instead of difference between carried and high end of range)

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 21	
TOTAL POINT VALUE: 2.5	LEARNING OBJECTIVE: D
SAMPLE ANSWERS	
Part a: 0.75 point	
<p>Any three of the following answers were accepted:</p> <ul style="list-style-type: none"> • The SAO needs to meet state regulations, not NAIC • The opinion paragraph does not mention LAE reserve adequacy • The Appointed Actuary is required to list the name and affiliation of the other actuary whose analysis the Appointed Actuary made use of • The third bullet should say "... obligations of the Company under the terms of its contracts and agreements" • "In my opinion, the amounts carried..." 	
Part b: 0.75 point	
<p>Any three of the following answers were accepted:</p> <ul style="list-style-type: none"> • The amount of the reserves covered by another's analysis or opinions in comparison to the total reserves subject to the actuary's opinion (i.e., materiality of the pool reserves) • The nature of the exposures and coverage • The way in which reasonably likely variations in estimates covered by another's analyses or opinions may affect the actuary's opinion on the total reserves subject to the actuary's opinion • The credentials of the individual(s) that prepared the analyses or opinion. • Whether the other actuary has used reasonable methods and assumptions • How recently the analysis was done; is it still relevant to the current opinion • The other actuary's affiliation/relationship to the pool/company • Whether the opining actuary has the expertise and resources to do an independent analysis himself 	
Part c: 1 point	
<p>Any four of the following:</p> <ul style="list-style-type: none"> • Pool reserves are material to total reserves • How the Company records reserves for the pool (e.g., based on what is reported by the pool with no independent projection, based on independent projection of the pool, or some combination) • Whether the actuary reviewed the other actuary's analysis and if so, the extent of such review • If there is a lag in reporting from the pool, should disclose how the Company accrues for the lag. • Collectability of assessments • Mechanism for recovering any pool deficits • Nature of member's liability as part of the pool 	
EXAMINER'S REPORT	
Part a	
<p>There are three easily identifiable errors/omissions and several other acceptable answers. Candidates generally performed well.</p>	
Part b	

SAMPLE ANSWERS AND EXAMINER'S REPORT

Four considerations come straight from the readings – those items were listed in both ASOP 36 and the COPFLR paper. There were also several other acceptable answers that were not necessarily included within the readings for this section of the syllabus. Candidates generally performed well.

Part c

This part was more challenging since the topic of Relevant Comments specifically related to pools was less familiar. Common incorrect answers included Relevant Comments related to materiality standard, exposure to asbestos & environmental, reinsurance, or IRIS ratios, or listing general pool information (pool lead, pooling percentages, other companies in the pool, etc.).

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 22	
TOTAL POINT VALUE: 2.75	LEARNING OBJECTIVE: D
SAMPLE ANSWERS	
Part a: 2.25 points	
<p>Regarding Statement of Actuarial Opinion:</p> <ul style="list-style-type: none"> • Intended user: regulator • Materiality standard: change in reserves to reach next RBC control level; a percentage of surplus; a percentage of reserves (the associated percentage and/or dollar amount of the selected materiality standard were also often provided by candidates) • Justification: Relevance to the company's solvency; issues related to regulation of solvency <p>Regarding commercial auto rate indication:</p> <ul style="list-style-type: none"> • Intended user: company management; line of business management; regulator • Materiality standard: a percentage of commercial auto premium (the associated percentage and/or dollar amount of the selected materiality standard were also often provided by candidates) • Justification: Relevance to the individual line of business <p>Regarding merger and acquisition:</p> <ul style="list-style-type: none"> • Intended user: company management; investors; management of the selling or acquiring company; regulator involved in approving a merger • Materiality standard: a percentage of surplus; a percentage of net income (the associated percentage and/or dollar amount of the selected materiality standard were also often provided by candidates) • Relevance: The value of the company is based on its net worth or potential earnings 	
Part b: 0.5 point	
<p>The answers for part b varied based on each candidate's materiality standard selected in part a. For example: The actuary's point estimate is 750 and the top of the range is 1000. The materiality standard is 100. Since the top of the actuary's range is greater than the point estimate plus the materiality standard, there is a risk of material adverse deviation.</p>	
EXAMINER'S REPORT	
Part a	
<p>Common errors included:</p> <ul style="list-style-type: none"> • Showing a correct calculation but an incorrect underlying basis (for example, using total auto premium rather than commercial auto only for the materiality standard for the commercial auto rate indication) • Providing overly general answers (i.e., "stakeholder") • Using a percentage of reserves as the materiality standard for M&A – the value of an entity for acquisition purposes is based on the entirety of its balance sheet or income statement, not any one particular item 	
Part b	
<p>A common error was to refer to the range below the actuary's point estimate – this is not relevant to the risk of material adverse deviation.</p>	

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 23						
TOTAL POINT VALUE: 3.5			LEARNING OBJECTIVE: D			
SAMPLE ANSWERS						
Part a: 2 points						
Sample 1: (excludes UEPR for long duration contracts)						
	Gross			Net		
	Low	Point	High	Low	Point	High
A. Actuary's Range of Reserves	2,070		2,530	1,035		1,265
B. Actuary's Point Estimate		2,300			1,150	
C. Company's Carried Reserves		2,000			1,000	
D. Difference between Company and Actuary	-70	-300	-530	-35	-150	-265
Sample 2: (includes UEPR for long duration contracts, either within the same table as shown below, or by providing a separate table for loss & LAE reserves and UEPR for long duration contracts)						
	Gross			Net		
	Low	Point	High	Low	Point	High
A. Actuary's Range of Reserves	2,160		2,640	1,107		1,353
B. Actuary's Point Estimate		2,400			1,230	
C. Company's Carried Reserves		2,090			1,080	
D. Difference between Company and Actuary	-70	-310	-550	-27	-150	-273
Part b: 1.5 points						
Sample calculation:						
	2013	2012	2011	2010	2009	
Development/ Prior Year PHS	12/275 = .044	25/265 = .094	14/275 = .051	-15/325 = -.046	20/300=.067	
Item E sample answers:						
<ul style="list-style-type: none"> In three of the last five years, this company had adverse development in loss and loss expenses greater than 5% of prior year policyholder surplus. These years are 2009, 2011, and 2012. This company has been booking reserves below the actuary's minimum range of reasonable estimates leading to this consistent development over the years. The main driver of the development is the Workers Compensation reserves which are consistently coming in with higher severities than predicted. Adverse development in last 5 years did exceed 5% of surplus at least 3 times. This occurred in 2012, 2011, and 2009. This is due to higher than expected reported emergence in Asbestos and Environmental claims. 						
EXAMINER'S REPORT						
Part a						
Candidates generally performed well on this part. Common errors included:						
<ul style="list-style-type: none"> Not showing both the gross and net values separately Not showing the actuary's range of reserve estimates Not including the difference of company carried reserves and actuary's range of reserve 						

SAMPLE ANSWERS AND EXAMINER'S REPORT

estimates

- In item D many candidates calculated :actuary estimate – company carried” instead of “company carried – actuary estimate”

Part b

Many candidates correctly performed the calculations, but some missed parts of the language for Item E.

Common errors in the calculation:

- Calculating adverse development as development divided by current year surplus instead of development divided by prior year surplus
- Not using 5% as the threshold for adverse development

Common errors in the language for Item E:

- Not listing years with adverse development
- Not including the reasons for the adverse development

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 24	
TOTAL POINT VALUE: 2.5	LEARNING OBJECTIVE: E
SAMPLE ANSWERS	
Part a: 0.5 point	
<ul style="list-style-type: none"> • Runoff company remains primarily liable in case where reinsurer goes bankrupt/is unable to pay vs. novation → company (primary insurer) is completely released from all liability • Runoff agreement covers adverse development and obligations for a line no longer actively marketed by the ceder, the ceder is still the primary insurer, the assumer is the reinsurer. Novation transfers all risks, the assumer is primary and the ceder breaks all ties. • Runoff: when you cede 100% of the line of business to a third party and you're no longer marketing the business but may still be liable if 3rd party defaults. Novation: you're also transferring your line of business to the 3rd party except you'll no longer be liable for the business ceded. • Novation is when one party is absolved of any legal responsibility. In a runoff agreement the primary insurer is still responsible but the reinsurer agrees to pay for the claims. • Runoff = insurer retains 1st responsibility. Novation = no responsibility • Under the runoff agreement insurer still has liability when reinsurer gets insolvent vs. novation doesn't (because it extinguishes all liabilities) • Runoff agreement: would be reinsurance with 100% ceded. Insurer is still primary responsible. Novation: contract is completely replaced by another one. Insurer would not have any more responsibility. • Runoff: insurer is still contingently liable for ceded reserves. Novation: completely extinguishes liability for ceded reserves for ceding company • Novation exhausts liabilities entirely including claims handling, runoff does not 	
Part b: 0.5 point	
<ul style="list-style-type: none"> • retroactive reinsurance; novation with affiliated company • (1) The parties to the transaction are affiliates and the transaction has no prior approval of the domiciliary regulators of the parties. (2) The accounting for the original reinsurance agreement will be altered from retrospective to prospective. 	
Part c: 1 point	
<p>Any two of the following:</p> <ul style="list-style-type: none"> • That the reinsurer is properly licensed • The transferred risks should contain the same policy limits, deductibles (same coverages basically) • Ensure no guarantee of profit to either side • Ensure that contract limits and coverages are the same as the primary insurer • Has the ceding company stopped all marketing of the line it intends to discontinue? • Is there any contingent commission or loss sharing involved in the contract? • Make sure there are no additional agreements between the reinsured and reinsurer that could reduce risk of significant loss or timing of payments (i.e., ensure that the reinsurance agreement meets the requirements of risk transfer) • Make sure there is <u>no</u> chance of cancellations in the contract – runoff agreements cannot be cancelled • Reinsurer must undergo property assessment (e.g., guarantee fund) 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

<ul style="list-style-type: none">• Reinsurer needs to be rated from at least 2 organizations and the rating must be at least the same as insurer
Part d: 0.5 point
<ul style="list-style-type: none">• Amount is recorded as a paid loss• If the amount paid is less than the reserves transferred, the difference is recorded as a decrease in incurred loss
EXAMINER'S REPORT
Part a
Candidates generally struggled with this part, and some candidates provided definitions for both runoff and novation without highlighting the primary difference (who is primarily liable after the novation or run-off).
Part b
Candidates struggled to identify situations where an insurer would not be eligible for reinsurance accounting treatment under a novation.
Part c
Candidates performed better on this part, and SSAP 62R has a large list of items for a regulator to review before approving reinsurance accounting treatment for a property-casualty run-off agreement. Common errors included: <ul style="list-style-type: none">• Referencing financial strength but not including that the reinsurer financial rating must be greater or equal to the ceding insurer• Listing that there had to be risk transfer and then explaining risk transfer rather than providing a second item• Describing risk transfer methods such as the 10-10 rule or ERD for one of the items
Part d
Candidates generally struggled with this part. There were many references to changes in income statements and balance sheets but not how the amount paid to the assuming entity for a property-casualty run-off agreement was recorded. Many candidates stated that reserves would be reduced which does not explain how the amount was recorded. Some candidates incorrectly stated that the amount is recorded as a ceded paid loss or a reduction to paid loss.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 25	
TOTAL POINT VALUE: 3.5	LEARNING OBJECTIVE: E
SAMPLE ANSWERS	
Part a: 1.5 points	
<p>Sample 1:</p> <ul style="list-style-type: none"> • Purchased 12/1/2013, effective 1/1/2014; • Purchased 1/1/2015, effective 1/1/2015; • Purchased 6/1/2014, effective 7/1/2014; • Prospective Policy is purchased and effective before any of the policy has been incurred. Retro policy is purchased an effective after entire policy has been incurred. Policy with both is purchased and effective during the policy. <p>Sample 2:</p> <ul style="list-style-type: none"> • Prospective – purchase date = 2/1/2015, effective date = 1/1/2015, selected dates because contract needs to be in effect on the day the policies are written and purchase date can be after the effective date as long as close to effective date; • Retro – purchase date = effective date = 1/1/2020, retro covers liabilities that have already been incurred. Purchase and effective in 2020 ensures ceded losses are in the past; • Both – purchase = effective = 7/1/2014, this way the liabilities incurred prior to 7/1/2014 will be retro re and the liabilities incurred from 7/1/2014 to 12/31/2014 will be covered by prospective reinsurance. <p>Sample 3:</p> <ul style="list-style-type: none"> • Only Prospective – purchase date and effective date of 1/1/2014. Since it must cover future risks it needs to be effective when reinsured risks are effective, no later; • Only Retrospective – purchase date of 1/1/2015, effective date of 1/1/2014. This ensures all risks covered are from past occurrence period; • Both – purchase date of 7/1/2014, effective date of 1/1/2014 so portion of occurrences in the past and portion in a future period; Prospective Policy is purchased and effective before any of the policy has been incurred. Retro policy is purchased and effective after entire policy has been earned. 	
Part b: 1 point	
<p>Sample 1:</p> <ul style="list-style-type: none"> • Reinsurer must accept significant underwriting risk, for example > 1% ERD or pass 10 – 10 rule; • There must be timing risk or the reinsurer is not exposed to as much risk as necessary to qualify for reinsurance accounting. <p>Sample 2:</p> <ul style="list-style-type: none"> • Timing risk, the cash flows between the insurer and reinsurer should not be at predetermined dates; • Underwriting risk, the reinsurer should not be guaranteed a profit, with exception of substantially all clause. <p>Sample 3:</p> <ul style="list-style-type: none"> • Must be reasonably possible for the reinsurer to realize a loss; • Timing risk: the timing of the future payments must be unknown. <p>Sample 4:</p> <ul style="list-style-type: none"> • Must transfer significant insurance risk: includes both underwriting risk (in terms of 	

SAMPLE ANSWERS AND EXAMINER'S REPORT

amounts reinsurer must pay) and timing risk (when reinsurer must pay); <ul style="list-style-type: none">• Must be a reasonable chance that the reinsurer will sustain a significant loss from the transaction. Some suggest a 10% or greater chance experience at least a 10% loss.
Part c: 1 point
Sample 1: <ul style="list-style-type: none">• A payment timing clause to prevent immediate availability of funds violates timing risk;• A loss ratio cap which guarantees profits for the reinsurer would violate the significant loss requirement. Sample 2: <ul style="list-style-type: none">• A 100% loss ratio cap would mean the reinsurer cannot experience a loss, and therefore they would not pass the ERD test;• Timing – would prevent reinsurance accounting if contract says reinsurer makes all the payments on 12/31, as there would be no timing risk. Sample 3: <ul style="list-style-type: none">• All losses will be paid on July 1st, 2016, no timing risk;• Reinsurer losses will be capped at a LR of 80%, no risk of significant loss. Sample 4: <ul style="list-style-type: none">• Risk transfer: Premium = \$1M, max recoverable = \$1.1M;• Timing risk: all recoverables paid on 1/1/2015. Sample 5: <ul style="list-style-type: none">• Yearly payment schedule, reinsurer only pays 12/31 for all losses in year, this delays timely reimbursement and this is not enough timing risk;• Reinsurer has 80-% loss ratio cap, since this limits possibility of significant loss.
EXAMINER'S REPORT
Candidates generally performed well on all parts of this question.
Part a
The most common errors were made on the fully retrospective and both prospective and retrospective treaty dates and explanations. On the retrospective section many candidates provided dates in the middle of the primary policy period. On the both prospective and retrospective section, many candidates that were outside of the primary policy term. In addition, many candidates did not provide a brief explanation.
Part b
Common error: Some candidates stated underwriting and timing risk, but only defined underwriting risk.
Part c
Many candidates listed common reinsurance provisions that did not necessarily result in failing risk transfer, such as contingent ceding commissions or aggregate limits. These items could result in risk transfer depending on the parameters of the provision, but the candidate did not explicitly state a parameter that would result in the policy failing risk transfer.