26. (2.25 points)

Given the following scenario for an insurance company:

An actuary performed an analysis of unpaid claims to prepare the Statement of Actuarial Opinion (SAO) as of December 31, 2016.

- The actuary's range of reasonable estimates for the reserves is $400 million to $475 million.
- The insurance company booked reserves of $450 million.
- Policyholders' surplus is $600 million.

a. (1 point)

Propose and justify two materiality standards based on different metrics.

b. (0.25 point)

On May 1, 2017, the insurance company's claims department informs the actuary of an error in the December 31, 2016 data. The error would have increased the actuary's workers compensation estimated ultimate losses by $10 million for accident year 2016. For the scenario above, briefly describe whether the data error should be communicated to the intended user of the actuary's work products.

c. (0.5 point)

Other than those provided in part a. above, briefly describe two bases for a materiality standard in the SAO.

d. (0.5 point)

Identify two places in the SAO where the materiality standard is disclosed.

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as company management, Schedule F, Notes to Financials, and ratings from rating agencies.

A common error was listing other incorrect sources, such as talking to the reinsurer's claim staff, interviewing regulators, or reviewing the reinsurer's Schedule F, etc.

QUESTION 26	
TOTAL POINT VALUE: 2.25	**LEARNING OBJECTIVE: D**
SAMPLE ANSWERS	

Part a: 1 point

Sample 1 Proposals

- 1% of surplus = $6M
- 5% of surplus = $30M
- 10% of surplus = $60M
- 20% of surplus = $120M

Sample 2 Proposals

- 1% of reserves = $4.5M
- 5% of reserves = $22.5M
- 10% of reserves = $45M
- 20% of reserves = $90M

Sample Justifications

- Maintain adequate surplus to cover risks and maintain solvency
- Avoid regulatory concerns around solvency
- Avoid triggering RBC action level
- Could have an impact on management/regulator/investor's decision-making
- Could cause a change to the opinion
- Avoid triggering an unusual IRIS ratio

Part b: 0.25 point

- No communication needed, since a $10M error is not material. (Accurate for candidates using 5% or more of surplus or reserves in Part a)
- The error must be communicated, since $10M is above the materiality standards in Part a. (Accurate for candidates using 1% of surplus = $6M or 1% of reserves = $4.5M in Part a)
- No communication needed, since the actuarial opinion would not change, as the booked reserve is still within the new range of reasonable estimates

Part c: 0.5 point

- % of surplus (if not used in Part a)
- % of reserves (if not used in Part a)
- Amount that would trigger the next RBC action level

- Amount that would cause a change in financial rating
- Amount that would cause surplus to fall below minimum capital requirements
- Amount that would cause an unusual IRIS ratio
- % of net income
- Multiples of net retained risk

Part d: 0.5 point

- Relevant Comments
- Exhibit B
- Disclosures was also an accepted response in lieu of Exhibit B

EXAMINER'S REPORT

Candidates were expected to know various materiality standard bases, determine whether an error is material and should be communicated, and know the sections of the Statement of Actuarial Opinion where the materiality standard is disclosed.

Part a

Candidates were expected to propose two materiality standards based on the data provided in the question and justify each standard. The justification needed to address the implications of the chosen materiality standard.

Common mistakes included:

- Not providing a justification for the materiality standard.
- Not addressing the implications of the materiality standard in the justification. For example, if 10% of surplus was chosen as the materiality standard, simply saying that 10% is a "significant portion of surplus" was not sufficient. The candidate needed to make a connection to the implications of the standard, such as a solvency, financial concerns, regulatory concerns, a change to the opinion, etc.
- Proposing materiality standards of $25M or $50M, based on the rationale that they are the differences between the carried reserve and the endpoints of the actuarial range of reasonable reserves. The materiality standard should be determined independently from the actuary's range of reasonable reserves. When deciding whether RMAD exists, the Appointed Actuary should consider the materiality standard in relation to the range of reasonable estimates and the carried reserves. The difference is not a materiality standard in and of itself.

Part b

Candidates were expected to determine whether the error should be communicated based on whether it was material or whether the actuarial opinion would change.

Common errors included:

- Not answering the question on whether the error should be communicated
- Stating that $10M is a significant or material amount when the materiality proposals in Part a were above $10M
- Stating that the error needs to be communicated even though it is not material

Part c

Candidates were expected to know additional materiality standards besides those used for Part a.

Common errors included:

- % of premium (written or earned), since the materiality standard is used for purposes of addressing the risk of material adverse deviation in the loss reserve opinion
- Using a different % of the same materiality standard base as Part a (such as 5% of surplus or 5% of reserves when 10% was used in Part a), since the question asked to provide different bases than Part a
- Amount an actuary judgmentally selects
- Providing fewer than 2 items

Part d

Candidates were expected to list the two locations in the Statement of Actuarial Opinion where the materiality standard is disclosed.

Common mistakes included:

- Opinion
- Scope
- Exhibit A
- AOS

QUESTION 27	
TOTAL POINT VALUE: 3	**LEARNING OBJECTIVE: E**
SAMPLE ANSWERS	

Part a: 1 point

Target Taxable Income = Premium Received – Reserves Commuted * Discount Factor
-37,500 = Premium Received – 300,000 * 0.875
Premium Received = 225,000

Part b: 1.5 points

250 * (0.75 / 0.25) = 750   350 * (0.75 / 0.25) = 1,050   450 * (0.75 / 0.25) – Premium (250)= 1,100
250 * (0.75 / 0.25) = 750   350 * (0.75 / 0.25) = 1,050
250 * (0.75 / 0.25) = 750

1,500 + 750 = 2,250   1,200 + 1,050 = 2,250   900 + Reserves (300) + 1,100 = 2,300
1,500 + 750 = 2,250   1,200 + 1,050 = 2,250
1,500 + 750 = 2,250

Part c: 0.5 point

Any two of the following:

- Commutation provides cash infusion