1. **Learning Objectives:**

4. The candidate will understand how to prepare and be able to interpret insurance company financial statements in accordance with U.S. statutory principles and GAAP.

**Learning Outcomes:**

(4a) Prepare financial statement entries in accordance with generally accepted accounting principles.

(4d) Apply applicable standards of practice.

**Sources:**
GHFV-109-19 Health Insurance Accounting Basics for Actuaries

ASOP 21: Responding to or Assisting Auditors or Examiners in Connection with Financial Statements for All Practice Areas

**Commentary on Question:**
*Commentary listed underneath question component.*

**Solution:**

(a) Describe the different ways to classify health insurance contracts relating to their premium terms.

**Commentary on Question:**
*This was a straight forward recall question asking for information found in the source material. Some candidates only provided a list, and were not given credit if they did not describe the different classifications.*

- **Premium Mode** - frequency with which premiums are due
- **Contract Length and Renewability** - length of the contract and if it is renewable at expiration. In the US most contracts are 12 months there are various amounts of rules for renewals at expiration
- **Inflationary vs. non-inflationary benefits** - will the cost of benefits be more in the next year due to inflation. This is the case for most medical and dental services.
- **Premium Guarantee Period** - how long are rates guaranteed. What happens beyond the length of the contract
1. Continued

(b) Describe the four core activities of health insurance operations.

Commentary on Question:
This, again, was a straightforward recall question asking for information found in the source material. Generally speaking, candidates did better on this question than on part (a).

- **Premium cycle** - The insurer collects premiums from customers in exchange for providing insurance coverage.
- **Investments cycle** - The insurer invests excess funds, generating income from those investments.
- **Benefits cycle** - Policyholders receive benefits, directly or indirectly, from the insurer under the insurance coverage provided to them.
- **Expense cycle** - The insurer makes various other types of expenditures other than the payment of insurance benefits.

(c) Develop the necessary accounting entries on the following dates:

(i) 12/31/2019

(ii) 1/31/2020

(iii) 2/29/2020

Show your work.

Commentary on Question:
Candidates did poorly on this question. Many struggled to first indicate that there are offsetting debits and credits, and then struggled to recognize the appropriate accounts, that would make up the accounting entries.

(i) Dr Due & Unpaid Premium $1500
    Cr Unearned Premium $1500
    Dr Cash $1500
    Cr Due and Unpaid Premium $1500

(ii) Dr Unearned Premium $62.5
    Cr Earned Premium $62.5

(iii) Dr Unearned Premium $125
    Cr Earned Premium $125
1. Continued

(d) Develop the necessary accounting entries on:

(i) 1/31/2021

(ii) 2/28/2021

Show your work.

Commentary on Question:
Again, candidates did poorly on this question. In addition to not indicating debits and credits and getting the appropriate accounts, candidates struggled with calculating the correct valuations, likely due to the intricacy of the contract being canceled mid-month.

(i) Dr Due & Unpaid Premium $1500
    Cr Unearned Premium $1437.5
    Cr Earned Premium $62.5

(ii) Dr Unearned Premium $1437.5
     Dr Earned Premium $62.5
     Cr Due & Unpaid Premium $1500

(e) Based on the ASOP 21 guidelines with respect to a Request for Information, describe the responsibilities of:

(i) A Responding Actuary

(ii) A Reviewing Actuary

Commentary on Question:
Generally speaking, candidates did well on this question; however, some candidates did not seem to understand the relationship between the “responding” and “reviewing” actuary. Some candidates’ answers interpreted “reviewing” actuary as a peer reviewer and not the regulator.

(i) Responding Actuary should
    • cooperate with Reviewing Actuary
    • be responsive to requests from auditor/examiner
    • should help with compilation of information
    • discuss disagreements with responding actuary
    • be prepared to discuss data, assumptions, methods, models, and controls used
    • handle confidential information in accordance with Code of Professional Conduct
    • includes disclose relationship and other items in accordance with Code.
1. Continued

(ii) Reviewing Actuary should
- cooperate with Responding Actuary
- communicate in writing what is requested
- identify the timeframe in which the information is needed
- handle confidential information in accordance with Code of Professional Conduct.
- includes disclose relationship and other items in accordance with Code.
2. **Learning Objectives:**
   5. The candidate will understand how to evaluate the impact of regulation and taxation on companies and plan sponsors in the US.

**Learning Outcomes:**
(5a) Describe the regulatory and policy making process in the US.
(5b) Describe the major applicable laws and regulations and evaluate their impact.
(5c) Apply applicable standards of practice.

**Sources:**
Group Insurance (Chapter 5) and ASOP 8

**Commentary on Question:**
*Most candidates did well on part b. Some candidates struggled getting full credit with parts a, c and d. See commentary below for more details.*

**Solution:**
(a) Assess the results of the Within-Class Rate Testing. Show your work.

**Commentary on Question:**
*Most candidates were able to identify that the allowable differential between the minimum and maximum rates cannot exceed 67% and were able to identify that the grandfathered block failed, but few were able to identify the appropriate factors to include in the calculation. In order to receive full credit, a candidate must mention both Test 1 and Test 2. Partial credits were given for calculations. Some candidates were able to identify that the non-grandfathered block always passes the required tests.*

The “within-class” testing requirements are as follows:
- **Test 1:** The highest possible rate can be 67% higher than the lowest possible rate, which is determined by the $\pm 25\%$ rule. Allowable case characteristics and benefit variations are excluded from this calculation, which leaves the following:
  - Case Experience
  - Health Status
  - Duration of Coverage
- **Test 2:** Rate increases are limited to the sum of:
  - The percent change in the new business rate
  - 15% annually for the group’s experience
  - Any adjustments due to changes in coverage or case characteristics

In this example, no information was provided for parts 1 and 3 of Test 2. Therefore, only the group’s experience can be tested.

*Non-grandfathered Block:*
2. Continued

- Non-grandfathered plans always pass Test 1 due to the ACA modified community rating requirements.
- Non-grandfathered plans always pass the second requirement of Test 2 since rate differentiation is not allowed for a group’s experience and renewed groups get the same rate as new business groups.
- Since both tests pass, the block passes the “within-class” test.

**Grandfathered Block:**
This block fails Test 1 because the rate differential between the maximum and minimum rates is 72%, which exceeds the allowable 67%:

- Minimum Combined Factor = Minimum Case Experience Factor × Minimum Health Status Factor × Minimum Duration of Coverage Factor = 0.90 × 1.00 × 1.00 = 0.90
- Maximum Combined Factor = Maximum Case Experience Factor × Maximum Health Status Factor × Maximum Duration of Coverage Factor = 1.10 × 1.25 × 1.13 = 1.55
- Rate Differential = Max Combined Factor ÷ Minimum Combined Factor – 1 = 1.55 ÷ 0.90 = 0.72

This block fails Test 2 since it is possible that the block could have a 72% rate increase if they were rated at the minimum factor for case experience, health status, and duration of coverage in the prior year and renewed at each of the maximum factors.

(b) Identify which assumptions apply to the claim cost projections, according to ASOP 8, if the health benefit plan is a:

- Major medical plan
- Hospital indemnity plan

**Commentary on Question:**
Candidates did well at identifying the assumptions. Some candidates had trouble identifying which assumptions apply to major medical plans but not to hospital indemnity plans.

(i) The following assumptions apply to the claim cost projections for major medical plans:
- Projections of Covered Lives
- Levels and Trends in Morbidity, Mortality, and Lapsation
- Health Cost Trend
- Expected Impact of Known Contractual Arrangements with Health Care Providers and Administrators
- Provisions for Adverse Deviation
2. Continued

(ii) The following assumptions apply to the claim cost projections for hospital indemnity plans:
- Projections of Covered Lives
- Levels and Trends in Morbidity, Mortality, and Lapsation
- Provisions for Adverse Deviation

(c) Describe key considerations when projecting future results in cases where the new health benefit plan is a variation of an existing plan.

Commentary on Question:
Most candidates were able to identify some of the key considerations. Some candidates focused solely on the necessary adjustments for using past experience to project future results.

- Use of Business Plans to Project Future Results: The filing actuary should request and, if available, review relevant business plans for the health plan entity or health benefit plan that is the subject of the filing. The filing actuary should consider the information therein along with any other information relevant to the business plan in setting the assumptions and methodologies used in the filing. The filing actuary is not required to use assumptions identical to those in the business plan in developing the rate filing.
- Use of Past Experience to Project Future Results: The actuary should determine whether past claims experience can be used to project future results. The actuary should also determine the extent to which past experience trends are relevant to assumed future trends. The actuary should refer to ASOP No. 23, Data Quality, for guidance on data selection. In making these determinations, the actuary should consider the applicability and credibility of the data. These considerations may differ for the total claims in a period, the claims for a particular service category, and the experience trends. To the extent that the filing actuary concludes that the experience data is not applicable or credible for a particular use, the filing actuary should identify additional sources that are appropriate (see ASOP No. 25, Credibility Procedures). When using past experience to project future results, the actuary should make adjustments to reflect any known or expected changes that, in the actuary’s professional judgment, are likely to have a material effect on expected future results.
- New Plans or Benefits: The actuary should consider available data relevant to new plans or benefits. In the absence of sufficient data, the actuary should use data from similar benefits or plans of coverage that are reasonably consistent with the new plans or benefits.
2. Continued

(d) Define four types of regulatory benchmarks that you must adhere to in your filing.

Commentary on Question:
Most candidates were able to identify the projected loss ratio requirements, but failed to identify the other benchmarks.

- Rate Adequacy — Rates may be considered adequate if they provide for payment of claims, administrative expenses, taxes, and regulatory fees and have reasonable contingency or profit margins.
- Rates Not Excessive — Rates may be considered excessive if they exceed the rate needed to provide for payment of claims, administrative expenses, taxes, regulatory fees, and reasonable contingency and profit margins.
- Rates Not Unfairly Discriminatory — Rates may be considered unfairly discriminatory if the rates result in premium differences among insureds within similar risk categories that: (1) are not permissible under applicable law; or (2) in the absence of an applicable law, do not reasonably correspond to differences in expected costs.
- Projected Loss Ratio — A projected loss ratio may be considered unreasonable if it does not meet or exceed a threshold under applicable law.
3. **Learning Objectives:**

6. The candidate will understand how to evaluate retiree group and life benefits in the United States.

**Learning Outcomes:**

(6b) Determine appropriate baseline assumptions for benefits and population.

(6d) Describe funding alternatives for retiree benefits.

(6e) Apply actuarial standards of practice to retiree benefit plans.

**Sources:**

Group Insurance, Chapter 8, Retiree Group Benefits.

**Commentary on Question:**

*This question was focusing on retiree group benefit. It is important to understand retiree group’s special consideration, (part C), historical changings (part A) and trends (part B). Candidates need to show their clear understanding for different COB methods to get full credits on part D.*

**Solution:**

(a) List and explain some plan changes that were previously allowed before the Affordable Care Act (ACA) to reduce employer obligations.

**Commentary on Question:**

*Candidates in general did not answer this part well, some did get the RDS tax benefit loss.*

Adding Contributions: “Introducing or slightly increasing the level of retiree contributions” – cost reduction by shifting cost to EEs

Fixing Subsidies/Costs: “Adopting policies of setting retiree contributions as a fixed percentage of plan cost” – sharing increases in plan costs with their employees rather than fully absorbing those increases

Coordination of Benefits: “Changing the method of coordinating benefits with Medicare” – Introducing COB that shifted greater costs to primary payer.

Loss of RDS tax deductibility - this change caused plan sponsors to reconsider whether to seek the subsidy as opposed to other alternatives, such as offer PDPs.

Reducing benefit: employer may consider reducing retiree benefits.
3. **Continued**

(b) Describe the efforts employers have considered since the ACA to change the value proposition of their retiree’s health benefit programs.

**Commentary on Question:**
*Candidates did relatively well on this part of the question.*

- Introducing or slightly increasing the level of retiree contributions;
- Adopting policies of setting retiree contributions as a fixed percentage of plan cost; and
- Changing the method of coordinating benefits with Medicare.
- Redefining eligibility requirements to be more stringent, such as requiring a person to be at least age 60 with 15 years of service, rather than age 55 with five or ten years of service;
- Introducing service-related benefits; that is, the employer portion of plan cost varies depending on the employee's years of service at retirement;
- Adjusting retiree contributions based on the employee's age at retirement; that is, introducing early retirement reductions;
- Stating the employer subsidy as a fixed dollar amount, rather than a percentage; and
- Providing an account-based employer subsidy;
- Consumerism initiatives to encourage efficient care;
- Overall total cost management; and
- Other methods to effectively coordinate the employer plan with Medicare.
- Loss of RDS tax deductibility - this change caused plan sponsors to reconsider whether to seek the subsidy as opposed to other alternatives, such as offer PDPs.

(c) Explain the challenges of communicating with retirees about their medical benefits compared to active employees.

**Commentary on Question:**
*Candidates did fine for this session, some items are intuitive, but key to get full credits is location, technology, communication, and not willing to change plan.*

- Retirees are different from active employees in many ways. It is harder to communicate with them, because they do not come to work.
- Many have family physicians that they have been seeing for a long time, making it uncomfortable and difficult to change providers.
- Some move away from where they worked, and it is difficult to physically meet for a company-sponsored event.
- Retirees have difficulties to access/understand/use new technologies, eg, emails, mobile apps, make it harder to promote new programs to them.
3. Continued

(d) Identify the coordination of benefits method that will result in the greatest reduction of employer’s costs. Justify your response.

Commentary on Question:
Most candidates at least listed the methods of COB, but few used examples to illustrate how carve out is the best choice.

\[ C = \text{covered expense (the medical charge that is covered by the plan)}, \]
\[ M = \text{the Medicare payment, and} \]
\[ \% = \text{the application of the employer’s benefit provisions (accounting for any copays, deductibles, and member coinsurance)}, \]

\textbf{Standard COB:}
\[ \text{The lesser of } (C\times\%) \text{ or } (C-M) \]

\textbf{Exclusion:}
\[ (C-M) \times\% \]

\textbf{Carve-out}
\[ (C \times\%) - M \]

The carve-out method produces the smallest benefit under the employer plan. Under this method, the benefit is first determined assuming that Medicare did not exist, and then Medicare is subtracted from the result. It could be further justified by using an example,

Example C=1000
\[ M=500 \]
\[ \%=50\% \]

Under Standard COB, Plan pay min(1000\times50\%, 1000-500)=500
Under Exclusion, plan pays (1000-500)\times50\%=250
Under carve out, plan pay max(1000\times50\%-500, 0)=0
4. Learning Objectives:
3. The candidate will understand how to describe and evaluate government programs providing health and disability benefits in the U.S.

Learning Outcomes:
(3a) Describe Medicare benefits and evaluate pricing and filing.

Sources:

GHFV-825-19: Medicare Part D Prescription Drug Benefits

Commentary on Question:
Commentary listed underneath question component

Solution:
(a) List four approaches to improve Medicare solvency.

Commentary on Question:
Candidates did well on this question. Candidates who received full credit cited at least four valid approaches from the list below. Other valid approaches not explicitly described in the text below also received credit.

- Higher taxes;
- Reduce or eliminate some covered services;
- Increase Medicare cost sharing through higher deductibles and copays;
- Raise the eligibility age for benefits, for example to age 66 or 67;
- Adjust reimbursement to providers of care; and
- Encourage new initiatives and expand existing initiatives that lower trend.

(b)
(i) Describe each of the plan design components in the table above.

(ii) Calculate the True Out-of-Pocket Limit for 2008. Show your work.

Commentary on Question:
Most candidates did well on this question. Candidates who did not receive full marks made mistakes describing member out-of-pocket costs vs. accumulated costs (member and plan). Candidates who had difficulty determining the True out-of-pocket amount (TrOOP) often were unable to determine the correct amount of drug costs in the donut hole.
4. Continued

(i)

Deductible – amount of covered cost borne by the member before any benefits are paid

Initial coverage limit (ICL) - After the deductible is met, the member pays 25% of the covered cost up to the initial coverage limit.

Donut hole coverage – prior to 2010, members were responsible for 100% of drug spending; since 2010, there is a donut hole discount that is applied to the cost of drugs that varies between brand and generic

True out-of-pocket limit (TrOOP)
Deductible + Copayments up to the ICL + member attributed cost in the donut hole, or
the maximum amount of cost sharing that must be attributed to a member before entering the catastrophic phase;
Only payments for formulary drugs count towards the TrOOP

Total covered out-of-pocket Rx spending – accumulated drug costs (plan funded or member funded) at which the member moves into the catastrophic coverage

Catastrophic benefit – cost sharing of greater of 5% or drug costs, or copays that are indexed by year

(ii)
$275 deductible
25% up to ICL ($2,510 – $275) × 25% = $558.75
Donut hole = Estimated covered Rx costs before catastrophic – ICL
= $5,726.25 – $2,510 = $3,216.25
TrOOP = $275 + $558.75 + $3,216.25 = $4,050

(c) Calculate how the coverage in the Donut Hole will differ in 2020 compared to 2008. Show your work.

Commentary on Question:
Candidates did well on this question. Candidates who did not receive full credit often were unable to determine the correct amount of total drug costs in the donut hole, or the correct cost share percentages. Some candidates provided their answer in table format similar to the example in the study note; the two lines in the table specific to the donut hole were sufficient to receive full credit.
4. Continued

2008: members were responsible for all drug costs in the donut hole.
2020: CMS “closing the donut hole” with consistent 25% cost share after the initial deductible up to the TrOOP.

2008 donut hole: ($4,000 - $2,510) = $1,490 member pays, $0 plan pays

2020 donut hole, 25% member pays, 75% plan pays:
($4,000 - $2,510) × 25% = $372.50 member pays, $1,117.50 plan pays

Table format solution, similar to the study note

<table>
<thead>
<tr>
<th>2008 Standard Plan</th>
<th>Drug Costs</th>
<th>Member Pays</th>
<th>Cumul TrOOP</th>
<th>Plan Pays</th>
<th>Total Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; Deductible</td>
<td>$0-275</td>
<td>275.00</td>
<td>275.00</td>
<td>0.00</td>
<td>275.00</td>
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<tr>
<td>Deductible to ICL</td>
<td>$275-$2,510</td>
<td>558.75</td>
<td>833.75</td>
<td>1,676.25</td>
<td>2,235.00</td>
</tr>
<tr>
<td>Donut hole (all generic)</td>
<td>$2,510-$5,726</td>
<td>$1,490.00</td>
<td>2,323.75</td>
<td>0.00</td>
<td>1,490.00</td>
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<tr>
<td>Total Paid</td>
<td></td>
<td>$2,323.75</td>
<td>$1,676.25</td>
<td>$4,000.00</td>
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<tr>
<td>% Paid</td>
<td></td>
<td>58.1%</td>
<td>41.9%</td>
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</table>

<table>
<thead>
<tr>
<th>2020 with 2008 ded, ICL</th>
<th>Drug Costs</th>
<th>Member Pays</th>
<th>Cumul TrOOP</th>
<th>Plan Pays</th>
<th>Total Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; Deductible</td>
<td>$0-275</td>
<td>275.00</td>
<td>275.00</td>
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<tr>
<td>Deductible to ICL</td>
<td>$275-$2,510</td>
<td>558.75</td>
<td>833.75</td>
<td>1,676.25</td>
<td>2,235.00</td>
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<tr>
<td>Donut hole (all generic)</td>
<td>$2,510-$5,726</td>
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<td>1,206.25</td>
<td>$1,117.50</td>
<td>1,490.00</td>
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<tr>
<td>Total Paid</td>
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<tr>
<td>% Paid</td>
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<td>30.2%</td>
<td>69.8%</td>
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</tbody>
</table>
5. **Learning Objectives:**

6. The candidate will understand how to evaluate retiree group and life benefits in the United States.

**Learning Outcomes:**

(6a) Describe why employers offer retiree group and life benefits.

(6d) Describe funding alternatives for retiree benefits.

**Sources:**

Group Insurance, Skwire, 7th Edition, 2016, Chapter 8: Retiree Group Benefits

**Commentary on Question:**

*This question tested candidate’s knowledge of Medicare Supplement and how it integrates with Medicare payments.*

*Generally candidates did fairly well for parts a. and b. of the question. On part c, candidates did fairly well at calculating the different types of integration. Most did not do the final step of grouping up costs at the member level and lost partial credit. On part C.ii, candidates did not need to get part C.i. correct to receive credit as long as their recommendation was in line with their work and had justification.*

**Solution:**

(a) Describe how supplemental plans integrate with Original Medicare.

A supplement plan pays expenses for which the primary plan does not pay, including member coinsurance and copays.

This approach is possible only when the secondary plan has advance knowledge of the primary plan design.

(b) List the features of the standard Medigap plan designs.

- Part A member coinsurance
- Part B member coinsurance
- First 3 pints of blood
- Part A Hospice coinsurance

(c)

(i) Calculate the total cost to ABC and average cost to each employee under the different Medicare Integration methods. Show your work.

(ii) Recommend a method that aligns with the CFO’s goals. Justify your answer.
5. Continued

(i)

<table>
<thead>
<tr>
<th>Member ID</th>
<th>Medicare</th>
<th>Non-Medicare Payment</th>
<th>Exclusion Employer Paid</th>
<th>Carve Out Employer Paid</th>
<th>Standard Employer Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>143759812</td>
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<tr>
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<td>$693</td>
<td>$555</td>
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<td>Total</td>
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<td>$36,817</td>
<td>$29,453</td>
<td>$16,827</td>
<td>$36,817</td>
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</table>

<table>
<thead>
<tr>
<th>Summary by Member</th>
<th>Exclusion Mem Pd</th>
<th>Carve Out Mem Pd</th>
<th>Standard Mem Pd</th>
</tr>
</thead>
<tbody>
<tr>
<td>143759812</td>
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<td>$0</td>
</tr>
<tr>
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<td>$400</td>
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<td>$0</td>
</tr>
<tr>
<td>451327681</td>
<td>$4,723</td>
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<td>$0</td>
</tr>
<tr>
<td>Total</td>
<td>$7,363</td>
<td>$19,989</td>
<td>$0</td>
</tr>
</tbody>
</table>

(ii) Standard method because it is the richest plan for all members.
6. Learning Objectives:
4. The candidate will understand how to prepare and be able to interpret insurance company financial statements in accordance with U.S. statutory principles and GAAP.

Learning Outcomes:
(4a) Prepare financial statement entries in accordance with generally accepted accounting principles.
(4c) Project financial outcomes and recommend a strategy.

Sources:
Skwire, Group Insurance (Ch 41)
Health Insurance Accounting Basics for Actuaries (Ch 2.4)

Commentary on Question:
Commentary listed underneath question component.

Solution:
(a) The director of sales has proposed a new compensation plan for the sales team where growth will be linked to profit margins.

(i) Explain why increasing profit margins might not always lead to an increase in total earnings.

(ii) Propose an alternative compensation plan that might help XYZ meet their earnings goals. Justify your response.

Commentary on Question:
For part ii) sample solution provided below. However, any new proposals by candidate that incentivizes overall earnings growth and cannot be gamed would be acceptable. Comparison period should be year-over-year.

(i) Profit Margin can be gamed as a key metric. Self-Insured (ASO) Plans typically have higher Profit Margins while Fully Insured (Risk) Plans have lower Profit Margins, but Fully Insured Plans deliver higher Profit per customer than Self Insured. Profit Margin can also be cosmetically increased by allowing clients with low profit margins to terminate, which lowers overall earnings.

(ii) Compensation plan needs to incentivize earnings dollar growth. It should be weighted partially on customer growth and profit PMPM. One compensation plan could have separate targets for the Self-Insured and Fully-Insured book to avoid cannibalizing higher-profit customers with more volume of lower-profit customers.
6. Continued

(b) Create an income statement for this account for years 1-3. Show your work.

The client wants to switch from fully-insured to self-insured in years 4 & 5. The sales manager says that XYZ can target a profit margin of 10% in both years.

(ii) Create an income statement for this account for years 4-5. Show your work.

Commentary on Question:
Many candidates failed to defer the commission over the three-year period. Candidates also struggled to calculate year 2 and year 3 premium - ignoring the .5% profit margin growth in the prompt. Candidates needed to use the profit margin in order to calculate the years 2 and 3 premium. Some candidates lost points as they failed to show their work.
In part ii), many candidates did not understand the income statement for a self-insured plan. Candidates included premium, premium tax and claims in the income statement for years 4 & 5.
Credit will be given if candidate consistently using monthly numbers instead of annual numbers.

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>144,000</td>
<td>151,200</td>
<td>158,760</td>
</tr>
<tr>
<td>Premium</td>
<td>67,248,000</td>
<td>74,895,717</td>
<td>83,506,109</td>
</tr>
<tr>
<td>Claims</td>
<td>55,152,000</td>
<td>61,963,272</td>
<td>69,615,736</td>
</tr>
<tr>
<td>Gross Margin</td>
<td>$12,096,000</td>
<td>$12,932,445</td>
<td>$13,890,373</td>
</tr>
<tr>
<td>Admin Expense</td>
<td>5,760,000</td>
<td>6,138,720</td>
<td>6,542,341</td>
</tr>
<tr>
<td>Premium Tax</td>
<td>1,344,960</td>
<td>1,497,914</td>
<td>1,670,122</td>
</tr>
<tr>
<td>Commissions</td>
<td>5,604,000</td>
<td>5,604,000</td>
<td>5,604,000</td>
</tr>
<tr>
<td>Profit</td>
<td>(612,960)</td>
<td>(308,190)</td>
<td>73,910</td>
</tr>
<tr>
<td>Profit Margin</td>
<td>-0.9%</td>
<td>-0.4%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>
### (c) Describe the various components of administrative expenses.

**Commentary on Question:**

*Many candidates provided examples of administration expenses, but did not describe the components of the expenses.*

- Policy Acquisition Expenses – costs associated with generating new business
- Claim Administration Expenses – benefit adjudication costs on behalf of policyholders
- Policy Maintenance Expenses – all ongoing administration costs other than those used to pay claims, e.g. billing maintenance
- Investment Expenses – costs associated with generating investment income
- Corporate Overhead – fixed costs that are not attributable to a particular set of contracts

<table>
<thead>
<tr>
<th></th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>166,698</td>
<td>175,033</td>
</tr>
<tr>
<td>Fees</td>
<td>$7,747,222</td>
<td>$8,256,602</td>
</tr>
<tr>
<td>Claims</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Gross Margin</td>
<td>$7,747,222</td>
<td>$8,256,602</td>
</tr>
<tr>
<td>Admin Expense</td>
<td>$6,972,500</td>
<td>$7,430,942</td>
</tr>
<tr>
<td>Premium Tax</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Commissions</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Profit</td>
<td>$774,722</td>
<td>$825,660</td>
</tr>
<tr>
<td>Profit Margin</td>
<td>10.0%</td>
<td>10.0%</td>
</tr>
</tbody>
</table>
7. **Learning Objectives:**

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

**Learning Outcomes:**

(5a) Describe the regulatory and policy making process in the US.

(5b) Describe the major applicable laws and regulations and evaluate their impact.

(5c) Apply applicable standards of practice.

**Sources:**

**Commentary on Question:**
This question tested candidates's knowledge of major components of the Affordable Care Act, specifically those impacting rating compliance and premium stabilization.

**Solution:**

(a)

(i) Identify and explain the characteristics of the rate buildup that cause noncompliance.

(ii) Calculate the percent change in Christine’s premium PMPM to bring the rating into compliance, assuming you do not want to change John’s rating buildup. Show your work.

You want to keep the largest allowable differential between the premiums for John and Christine.

(iii) Calculate, John & Christine’s premium rates and a new base rate that maintains the same total premium. Show your work.

**Commentary on Question:**
Candidates generally performed well on parts (i) and (ii) of this question with many receiving full credit. Those not receiving full credit either did not acknowledge risk score or gender as a noncompliant rate factor under ACA or that the age factor for John and Christine should be the same. Part (iii) required making these corrections to the rating factors and then determining the resulting base rate needed to achieve the same total original premium as well as the impact to John and Christine’s individual premiums. Success on parts (i) and (ii) generally led to success on part (iii), but most candidates received at least partial credit.
7. Continued

(i)  
- **Age**: Christine and John should have the same rating factor for age given they are both 32  
- **Gender**: Gender is not an allowable rating factor per ACA  
- **Tobacco**: The maximum rate load in 2014 was 50% for a tobacco user; factor should be no more than 1.5  
- **Risk Score**: Health Status (Risk Score) is not an allowable rating factor per ACA  

(ii)  

<table>
<thead>
<tr>
<th></th>
<th>Original John</th>
<th>Original Christine</th>
<th>Corrected Christine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Rate</td>
<td>$300.00</td>
<td>$300.00</td>
<td>$300.00</td>
</tr>
<tr>
<td>Age Factor</td>
<td>x 1.05</td>
<td></td>
<td>1.1</td>
</tr>
<tr>
<td>Gender Factor</td>
<td>x 1</td>
<td></td>
<td>1.2</td>
</tr>
<tr>
<td>Area Factor</td>
<td>x 0.95</td>
<td></td>
<td>0.95</td>
</tr>
<tr>
<td>Plan Factor</td>
<td>x 1.03</td>
<td></td>
<td>1.03</td>
</tr>
<tr>
<td>Tobacco Factor</td>
<td>x 1</td>
<td></td>
<td>1.75</td>
</tr>
<tr>
<td>Risk Score</td>
<td>x 1</td>
<td></td>
<td>1.8</td>
</tr>
<tr>
<td>Premium PMPM</td>
<td>= $308.23</td>
<td>$1,220.58</td>
<td>$462.34</td>
</tr>
<tr>
<td>Rate Differential</td>
<td>= $462.34/$1,220.58 - 1</td>
<td>= -62%</td>
<td></td>
</tr>
</tbody>
</table>

(iii)  
Total Premium = John’s Original Premium + Christine’s Original Premium  
Total Premium = $308.23 + $1,220.58 = $1,528.81  

Per Parts (i) and (ii) maximum allowable premium differential between John and Christine is 50% after correction to age, gender, tobacco, and risk score factors  
Let X = John’s New Premium and 1.5X = Christine’s New Premium  
X + 1.5X = Total Premium = $1,528.81  
X = $611.52 = John’s Premium  
1.5X = $917.29 = Christine’s Premium  

Base Rate = John/Christine’s Premium/(Compliant Rating Factors)  
Solving for John:  
Base Rate = $611.52/(1.05 x 1.0 x .95 x 1.03 x 1.0 x 1.0) = $595.20  
*Using Christine’s Premium and Updated Rating Factors results in same Base Rate
7. Continued

(b)

(i) Identify and describe the three premium stabilization programs that were written into the ACA.

(ii) Evaluate the directional impact that John and Christine’s experience would have on Company B’s financials for each of the ACA premium stabilization programs identified. Justify your response.

Commentary on Question:
Most candidates earned full credit on part (i) and were able to identify and describe the three premium stabilization programs under the ACA. For part (ii), most candidates earned partial credit; full credit required an identified directional impact to the company’s financials and adequate justification.

(i)

- **Reinsurance**: Transitional, temporary 3-year program providing reimbursement to insurers for claims related to the cost of high cost individuals in the individual market reimbursing a percentage of claims above a given threshold subject to a maximum cap
- **Risk Adjustment**: Permanent program assessing a charge to health plans whose risk is below average and providing reimbursement to health plans whose risk is above average in the individual and small group markets
- **Risk Corridor**: Transitional, temporary 3-year program comparing a plan’s actual cost to target costs and using a defined schedule to determine whether a plan pays a portion of the gain or collects a portion of the loss

(ii)

- **Reinsurance**:  
  - Positive Impact to Company B’s Financials  
  - Under Reinsurance, individual claims above a threshold will trigger a reinsurance payment as a portion of excess  
  - Christine’s claims experience is above the threshold (2014: $45k)
- **Risk Adjustment**:  
  - Positive Impact to Company B’s Financials  
  - Risk adjustment transfers funds from carriers with low risk population to carriers with high risk  
  - John (1.0) and Christine (1.8) both have risk scores above the state average (0.95), which would increase the receivable due Company B or decrease the payable Company B owes
7. Continued

- **Risk Corridor:**
  - Neutral to Positive Impact to Company B’s Financials
  - Risk Corridor program tempers plan’s gains and losses
  - Christine’s claims *should* generate a loss for Company B even considering Risk Adjustment and Reinsurance
  - As a result, Risk Corridor would provide funds to Company B as a portion of that loss, or reduce payment needed if Company B is profitable due to the rest of its population
  - Impact *could* be neutral if Company B’s risk corridor ratio is between 97% and 103% and the couple’s combined experience does not move the risk corridor ratio outside of this range
8. **Learning Objectives:**
3. The candidate will understand how to describe and evaluate government programs providing health and disability benefits in the U.S.

**Learning Outcomes:**
(3a) Describe Medicare benefits and evaluate pricing and filing.

**Sources:**
Skwire Pages 138 to 141

**Commentary on Question:**
*Commentary listed underneath question component.*

**Solution:**
Explain the intended impact of each of the following laws on risk contracting between Original Medicare and private health plans:

(i) Tax Equity and Fiscal Responsibility Act of 1984
(ii) Balanced Budget Act of 1997
(iii) Medicare Prescription Drug, Improvement and Modernization Act of 2003
(iv) Patient Protection and Affordable Care Act of 2010

**Commentary on Question:**
The question asked to explain the intended impact of some high-profile laws on risk contracting between Original Medicare and private health plans.

It was the final question. Students may have run out of time. Another possibility is that the students may have felt a simple one sentence answer was sufficient rather than going into more detail.
8. Continued

<table>
<thead>
<tr>
<th><strong>Tax Equity and Fiscal Responsibility Act of 1984 (TEFRA)</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduced risk contracting between Medicare and private health plans – cap payments ~ 95% projected FFS costs</td>
<td></td>
</tr>
<tr>
<td>MCOs could use excess payments to provide additional benefits, including Rx coverage</td>
<td></td>
</tr>
<tr>
<td>Enrollment in Medicare HMOs grew rapidly.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Balanced Budget Act</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Created Medicare+Choice</td>
<td></td>
</tr>
<tr>
<td>Annual increases in payment rates much lower than underlying cost trends</td>
<td></td>
</tr>
<tr>
<td>Introduced risk adjustment to address the belief that HMOs had been overpaid due to favorable selection</td>
<td></td>
</tr>
<tr>
<td>HMOs reduced benefits and Medicare+Choice enrollment decided substantially</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Medicare Prescription Drug, Improvement and Modernization Act of 2003 (MMA)</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Created a Part D outpatient Rx benefit with its own risk adjustment model</td>
<td></td>
</tr>
<tr>
<td>Revitalized interest of insurance industry in Medicare market through the introduction of competitive bidding; if a bid is below the benchmark, plans could use a percentage of the difference (rebate) to increase benefits, reduce cost sharing or reduce Part B or Part D premiums (not all of the options were required to get full credit)</td>
<td></td>
</tr>
<tr>
<td>Introduced regional PPOs and special needs plans (SNPs)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Patient Protection and Affordable Care Act (ACA)</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate “star rating” from 1 to 5 stars based on quality measures</td>
<td></td>
</tr>
<tr>
<td>Bonus payments made for higher rated MA plans; funding is cut for lower-rated plans (rebate percentage is now a function of the “star rating”)</td>
<td></td>
</tr>
<tr>
<td>Introduced (retroactive to 2014) minimum loss ratio of 85%</td>
<td></td>
</tr>
</tbody>
</table>