

# GI 201 Model Solutions

## November 2025

### 1. Learning Objectives:

1. The candidate will understand the structure and functions of a general insurance company.

#### Learning Outcomes:

- (1a) Describe the various core and supporting functions of a general insurance company.
- (1c) Describe the marketing and distribution of general insurance products.
- (1e) Understand the process for underwriting general insurance policies.
- (1f) Describe the activities and challenges in the claim handling process.

#### Sources:

General Insurance Company Operations, SOA Study Note, May 2025

#### Commentary on Question:

*This item tested a candidate's understanding of various functions in the operation of a general insurer.*

#### Solution:

- (a) Compare the *average value method* to the *individual case method* with respect to both I and II.

#### Commentary on Question:

*The solution below is an example of a full credit solution.*

- I. Under the average value method, case reserves for each claim are set at an average value for the type of claim whereas the individual case method is reliant on a claim adjuster setting the reserves by reviewing all the information in the claim file.
- II. The average value method is used for claims with high frequency and relatively little variability in severity, such as those for auto physical damage. The individual case method is used for claims with great variability in severity and relatively low frequency, such as those for high-value liability claims and specialty lines claims.

## 1. Continued

(b) Compare the *formula method* to the *expert system method* with respect to both I and II.

**Commentary on Question:**

*The solution below is an example of a full credit solution.*

- I. Under the formula method, simple formulas are created for certain types of claims in which several variables for the claim are input and a case reserve estimate is produced. The expert system method is much like the formula method but it uses all the information about the claim, including subjective elements, in a complex formula in which the system outputs the case reserve.
- II. Both methods may be used for workers compensation wage loss claims. However, the expert system method is usually applied to only those claims involving certain types of injury, such as those with significant ongoing costs for medical and rehabilitation services.

(c) Compare the underwriting activities of line underwriters to staff underwriters.

**Commentary on Question:**

*The solution below is an example of a full credit solution.*

Line underwriters focus on individual policies and customers. They assign business to their proper rating classification. Staff underwriters focus on underwriting strategy and guidelines. They are responsible for monitoring line underwriters' compliance with the guidelines.

(d) Under certain circumstances, an insurer may make use of a managing general agent (MGA).

Describe those circumstances.

**Commentary on Question:**

*The solution below is an example of a full credit solution.*

An insurer could make use of an MGA when entering a new territory or new product market, in which the MGA has more experience than the insurance company in marketing, rating and/or underwriting the business.

## **2. Learning Objectives:**

2. The candidate will understand the regulatory environment for general insurance.

### **Learning Outcomes:**

(2c) Understand the issue of discrimination and insurance.

(2e) Describe the development of general insurance programs controlled by government or collective insurance industry organizations and their mechanisms of operation.

### **Sources:**

IAA Risk Book: Non-Life Perils and Coverages, Insurance Regulation Committee, International Actuarial Association, May 2023

Government Provision of General Insurance, SOA Study Note, May 2025

### **Commentary on Question:**

*This item tested a candidate's understanding of residual markets.*

### **Solution:**

(a) Describe the purpose of a residual insurance market.

### **Commentary on Question:**

*The solution below is an example of a full credit solution.*

Residual markets exist to provide insurance to consumers with exposures that are considered high risk by the insurance market and those insurers are unwilling to underwrite them and/or have prices that are unaffordable.

(b) Explain why residual market rates are frequently inadequate.

### **Commentary on Question:**

*The solution below is an example of a full credit solution.*

This is because insureds that purchase insurance in the residual market typically cannot afford actuarially adequate premiums and coverage is mandatory or essentially mandatory.

(c) Explain who are the bearers of the short-term and long-term costs.

### **Commentary on Question:**

*The solution below is an example of a full credit solution.*

## 2. Continued

- Short-term bearers of losses: All the insurance companies that offer the product in the voluntary market.
- Long-term bearers of losses: All the individuals that purchase similar products in voluntary markets, because the insurance companies operating in voluntary markets will attempt to recover these losses by increasing premiums.

(d) Describe the structure and operation of another residual market mechanism.

### **Commentary on Question:**

*There are several different possible residual market mechanisms (other than special-purpose insurer with government backing). The solution below is an example of a full credit solution.*

A small number of voluntary market insurers are selected to service the residual market, but all the insurers in the voluntary market participate in the program. The cost of the program, such as total incurred losses in excess of total premium charged, is allocated to each insurer usually in proportion to the insurer's premium written in the voluntary market to the total voluntary market premium.

### **3. Learning Objectives:**

2. The candidate will understand the regulatory environment for general insurance.

### **Learning Outcomes:**

(2c) Understand the issue of discrimination and insurance.

(2d) Discuss the issues regarding usage-based insurance and telematics in automobile insurance.

(2g) Understand the function and regulation of price optimization.

### **Sources:**

Price Optimization White Paper, Casualty Actuarial and Statistical (C) Task Force, National Association of Insurance Commissioners

Usage Based Insurance and Telematics, SOA Study Note, May 2025

### **Commentary on Question:**

*This item tested a candidate's understanding of regulatory issues in the use of price optimization, big data, UBI and telematics for underwriting and rating policies.*

### **Solution:**

(a) Describe the concept of price optimization for insurance pricing.

### **Commentary on Question:**

*The solution below is an example of a full credit solution.*

Measuring and using a consumer's price elasticity of demand for the purpose of "optimizing" the premium charged to the highest amount possible without causing the consumer to switch to another insurer.

(b) Describe a regulatory concern for insurance pricing using big data.

### **Commentary on Question:**

*The solution below is an example of a full credit solution.*

Many rating laws require rates to not be excessive, inadequate, or unfairly discriminatory. Price optimization would appear to violate the not excessive standard and may violate the unfairly discriminatory standard.

(c) Compare the PAYD and PHYD methods of auto insurance pricing.

### **Commentary on Question:**

*The solution below is an example of a full credit solution.*

### 3. Continued

PAYD policies adjust the premium paid based upon the actual recorded amount driven by the policyholder. PHYD policies adjust the premium based upon many data factors recorded, such as time of day the vehicle is driven, instances of rapid acceleration habits, and instances of hard braking.

(d) Explain why a jurisdiction may encourage PAYD rating, while disapproving PHYD rating.

**Commentary on Question:**

*There are various possible valid answers to this item. The solution below is an example of a full credit solution.*

A jurisdiction may encourage PAYD policies because a PAYD system leads to increased actuarial accuracy and provides policyholders a direct means to control costs and reduce premium by driving less.

A jurisdiction may disapprove of PHYD plans because of policyholder privacy concerns given the detailed telematics data captured, such as location and time of day the vehicle is driven.

#### **4. Learning Objectives:**

2. The candidate will understand the regulatory environment for general insurance.

#### **Learning Outcomes:**

- (2e) Describe the development of general insurance programs controlled by government or collective insurance industry organizations and their mechanisms of operation.

#### **Sources:**

Government Provision of General Insurance, SOA Study Note, May 2025

Private Flood Insurance and the National Flood Insurance Program, Congressional Research Service, CRS Report R45242, Updated Jan. 9, 2023

#### **Commentary on Question:**

*This item tested a candidate's understanding of the National Flood Insurance Program (NFIP), in which the U.S. government provides flood insurance.*

#### **Solution:**

- (a) Explain why the U.S. government created the NFIP.

#### **Commentary on Question:**

*The solution below is an example of a full credit solution.*

The NFIP was created because the private insurers at the time were not offering flood insurance coverage due to there being no accurate rating models. The government wanted to reduce financial aid paid after an event and instead have claims paid through pre-funding with insurance premiums. Additionally, the government wanted to integrate this coverage with flood plain mapping.

- (b) Describe NFIP insurance cross-subsidies, including their purpose.

#### **Commentary on Question:**

*The solution below is an example of a full credit solution.*

This is the practice of charging some NFIP policyholders less than the full actuarial rate. The difference is covered by charging premiums higher than the full actuarial rate from other NFIP policyholders. The purpose is to make insurance more affordable for those in high-risk areas or with older properties.

- (c) Providing flood insurance is one of the two main policy goals of the NFIP.

Describe the other key policy goal.

## 4. Continued

### **Commentary on Question:**

*The solution below is an example of a full credit solution.*

To mitigate and reduce the nation's flood risk through the development and implementation of a floodplain management standard.

(d) Describe one advantage and two disadvantages of increasing private sector involvement.

### **Commentary on Question:**

*There is more than one advantage and more than two disadvantages. The solution below is an example of a full credit solution.*

Advantage:

- Private insurers may offer more flexible and integrated flood policies, potentially at lower cost for some consumers.

Disadvantages:

- Private insurers may engage in adverse selection by insuring only lower-risk properties and leaving the higher-risk properties to the NFIP.
- Consumer protections could vary by state, potentially leaving some policyholders vulnerable from these differences.

(e) Identify two barriers to private sector involvement in providing flood insurance in the United States.

### **Commentary on Question:**

*There are more than two barriers. The solution below is an example of a full credit solution.*

- The NFIP “non-compete” clause which can restrict private insurers’ participation.
- There may be challenges for private insurers in accurately assessing flood risk without a major investment in flood models and experts.

## 5. Learning Objectives:

3. The candidate will understand tort law and insurance law with respect to general insurance.

### Learning Outcomes:

(3a) Describe and interpret the key elements of tort law and the underlying principles of insurance law.

(3e) Understand the reasons for the use of no-fault insurance for some general insurance lines of business.

(3f) Understand the international legal environment as it relates to general insurance.

### Sources:

Tort Law – Topics for General Insurance Actuaries, SOA Study Note, May 2025

Excerpts from Business Law for Insurance Professionals, 1st Edition, Developed for the SOA by The Institutes

Government Provision of General Insurance, SOA Study Note, May 2025

### Commentary on Question:

*This item tested a candidate's knowledge of tort law and no-fault laws with respect to its effect on general insurance.*

### Solution:

(a) Contrast torts with crimes.

### Commentary on Question:

*There are various possible valid answers to this item. The solution below is an example of a full credit solution.*

Torts relate to private wrongs that cause harm whereas crimes are public wrongs.

(b) Describe three differences between the civil law system and the common law system.

### Commentary on Question:

*There are more than three differences. Only three were required for full credit. The solution below is an example of a full credit solution.*

- Civil law uses comprehensive codes and statutes as its basis whereas common law is based upon facts from precedent cases.
- Judges in civil law find legislative provisions within statutes and apply them to the facts of the case whereas judges in common law interpret the facts of the case by examining precedent cases.

## 5. Continued

- Civil law cases are decided by the judge whereas many common law cases are decided by a jury.

(c) Explain why a jurisdiction may prefer a no-fault system over a tort law system for automobile bodily injury compensation.

### **Commentary on Question:**

*The solution below is an example of a full credit solution.*

Total cost should decrease as there are reduced court costs and injured claimants receive payments quickly as they don't have to go to court to ascertain fault.

(d) Describe the distinguishing characteristic of a modified no-fault system compared to a pure no-fault system.

Modified no-fault systems only permit lawsuits if a defined threshold, verbal or monetary, is exceeded. Pure no-fault systems do not permit any lawsuits.

## **6. Learning Objectives:**

3. The candidate will understand tort law and insurance law with respect to general insurance.

### **Learning Outcomes:**

(3a) Describe and interpret the key elements of tort law and the underlying principles of insurance law.

(3b) Discuss the issues of tort trends and tort reform as it applies to the general insurance industry.

(3d) Understand mass torts/class action suits and discuss their effect on the general insurance industry.

(3i) Discuss the issue of social inflation and its effect on general insurance.

### **Sources:**

Tort Law – Topics for General Insurance Actuaries, SOA Study Note, May 2025  
Excerpts from Business Law for Insurance Professionals, 1st Edition, Developed for the SOA by The Institutes

Social Inflation: Navigating the evolving claims environment, The Geneva Association, Dec. 2020

### **Commentary on Question:**

*This item tested a candidate's knowledge of the tort law system and its effect on general insurance.*

### **Solution:**

(a) Identify the classification for each of the following types of tort awards in the table below.

ANSWER:	
<b>Tort Award</b>	<b>Classification</b>
Pain and suffering	
Additional living expenses	
Nominal damages	
Loss of future earnings	
Punitive damages	
Emotional Distress	

## 6. Continued

ANSWER:	
<b>Tort Award</b>	<b>Classification</b>
Pain and suffering	II
Additional living expenses	I
Nominal damages	III
Loss of future earnings	I
Punitive damages	III
Emotional Distress	II

(b) Identify two external information sources for estimating tort cost trends that are commonly used by insurers.

**Commentary on Question:**

*There are various possible valid answers to this item. The solution below is an example of a full credit solution.*

CPI trend and Medical CPI trend.

(c) Compare the two sources identified in part (b) regarding their use as a tort cost trend estimator.

**Commentary on Question:**

*There are various possible valid answers to this item that are dependent on the response to item (b). The solution below is an example of a full credit solution based upon the response CPI trend and Medical CPI trend for part (b) .*

Both sources are readily available. CPI trend is based upon measures representing all goods and services which includes many that are not relevant to tort trends. Medical CPI trend is based upon measures representing all medical goods and services is a better measure of tort trends because many torts involve bodily injury.

(d) Define social inflation based upon a broad interpretation.

**Commentary on Question:**

*The solution below is an example of a full credit solution.*

All ways in which insurers' claims costs rise at a rate above general economic inflation.

## 6. Continued

(e) Describe two strategies used by plaintiffs' lawyers that have contributed to social inflation.

**Commentary on Question:**

*There are several strategies used. Only two were required for full credit. The solution below is an example of a full credit solution.*

- Litigation funding by third party investors that bring to court cases that may have not been brought forward without such funding.
- Increased marketing for claimants which increases the number of claimants when successful.

(f) Describe two societal attitude shifts that have contributed to social inflation.

**Commentary on Question:**

*There are several societal attitude shifts that contribute to this. Only two were required for full credit. The solution below is an example of a full credit solution.*

- Society's increasing belief that those harmed must be compensated by the party that can afford it.
- Public sentiment that corporations are "bad" so finding a corporation liable is more likely.

(g) Identify two characteristics of a mass tort claim that distinguish it from a routine claim.

**Commentary on Question:**

*There are several characteristics. Only two were required for full credit. The solution below is an example of a full credit solution.*

- They infrequently occur and have the potential for extremely large awards.
- They typically include a defendant (or defendants) with the ability to pay very large awards through assets and insurance.

## 7. Learning Objectives:

4. The candidate will understand elements of financial economics relevant to general insurance.

### Learning Outcomes:

(4a) Demonstrate knowledge of behavioral finance.

### Sources:

Ritter, J., *Behavioral Finance*, Pacific-Basin Finance Journal, Vol. 11, Issue 4, Sep. 2003

### Commentary on Question:

*This item tested a candidate's understanding of certain elements of financial economics that are relevant to general insurance.*

### Solution:

(a) Identify and describe two other patterns of cognitive bias as discussed by Ritter in *Behavioral Economics*.

### Commentary on Question:

*There are more than two other patterns. Only two were required for full credit. The solution below is an example of a full credit response.*

#### Heuristics

- This refers to the use of simple rules that make decision making easier. However, these simple rules don't apply to all situations which may lead to suboptimal decisions.

#### Representativeness

- This refers to focusing on short term averages and giving little weight to long term trends when decision making. This can lead to suboptimal decisions.

(b) Evaluate whether an insurance market for personal lines property is an efficient market.

### Commentary on Question:

*This item asked for an evaluation. It was expected that the candidate would consider several factors of what constitutes an efficient market, and how that supports the evaluation. There are many possible ways to respond to this question to earn full credit. The solution below is an example of a full credit response. It does not include a full evaluation of every possible factor.*

## 7. Continued

In an efficient market, competitors should have few if no barriers to entry into the market and may adjust prices freely. The insurance industry is highly regulated with licensing and minimum capital requirements. Entering and leaving a market cannot be done freely, especially for personal lines. Furthermore, rates and underwriting are regulated so that price changes cannot be made quickly and freely.

In an efficient market, purchasers should have all the information they need to make a rational decision. Insurance consumers do not normally have information about the entire market for purchasing their coverage due to broker limitations and online information availability. Furthermore, many insureds do not shop around and tend to renew with the same insurer for many years.

For these reasons, insurance should not be viewed as an efficient market.

## **8. Learning Objectives:**

5. The candidate will understand the elements of financial reporting for general insurance companies.
7. The candidate will understand the standards of practice and professionalism required of the actuary.

### **Learning Outcomes:**

- (5a) Demonstrate knowledge of the different types of general insurance liabilities.
- (5b) Understand and apply the concepts of insurance accounting.
- (5c) Understand the different financial reporting standards for general insurers.
- (5d) Understand key terms and considerations related to claim liabilities.
- (7c) Demonstrate knowledge of the general insurance actuarial opinion and the role of the appointed actuary.

### **Sources:**

International Actuarial Association, IAA Risk Book: *Liabilities for General Insurance*, Insurance Regulation Committee, May 2023

General Insurance Financial Reporting Topics, Society of Actuaries, 5th Edition, 2021

- Chapter 14 (The General Insurance Actuarial Opinion)

### **Commentary on Question:**

*This item tested a candidate's knowledge of several characteristics regarding the insurance liabilities of a general insurance company*

### **Solution:**

- (a) Describe these two types of insurance liabilities for a general insurance company, using an example for each.

### **Commentary on Question:**

*There are several different examples for each of these types. Only one for each type was required for full credit. The solution below is an example of a full credit response.*

Pre-claim liabilities are related to future coverage under existing insurance contracts.

- An example is the insurer's unearned premium reserve. This is portion of the premium written that will provide coverage after the valuation date.

Post-claim liabilities are related to coverage for events that have occurred but are not yet settled.

## 8. Continued

- An example of this is an insurer's case reserves for the amount of the claims that occurred during the accounting period but have not been paid as of the valuation date.

(b) Describe two key differences between life insurance and general insurance with respect to insurance liabilities.

### **Commentary on Question:**

*There are several differences. Only two were required for full credit. The solution below is an example of a full credit response.*

#### Contract Term:

Life insurance contracts are typically long-term (often decades), while general insurance contracts are usually one year or less. So, a life insurance company's pre-claim liabilities dominate the insurance liabilities while the opposite is true for a general insurance company.

#### Liability Uncertainty:

There is very little uncertainty in a life insurance company's post-claim liabilities as it is only uncertain in timing not the amount. A general insurance company's claim liabilities have significant uncertainty in the amount and the timing.

(c) Compare these two concepts, including the treatment of uncertainty and risk margins.

### **Commentary on Question:**

*The solution below is an example of a full credit response.*

U.S. standards for an actuarial central estimate refer to an expected value over a range of reasonably possible outcomes. This would usually exclude extreme and unquantifiable events. It usually excludes any explicit risk margin. Statistical methods are not specifically required. The definition of reasonably possible is based on the actuary's judgment.

The Solvency II best estimate refers to a probability-weighted average of all future cash flows, on a discounted basis. This includes extreme events and must include an explicit risk margin. Estimation requires statistical methods to compute the variability of the estimate.

## 9. Learning Objectives:

5. The candidate will understand the elements of financial reporting for general insurance companies.

### Learning Outcomes:

(5b) Understand and apply the concepts of insurance accounting.

(5c) Understand the different financial reporting standards for general insurers.

(5d) Understand key terms and considerations related to claim liabilities.

(5e) Understand the reporting of financial instruments.

(5f) Understand and apply the concepts of reinsurance accounting.

### Sources:

General Insurance Financial Reporting Topics, Society of Actuaries, 5th Edition, 2021

- Chapter 3 (Accounting for Financial Instruments)
- Chapter 4 (Accounting for Reinsurance Contracts)

### Commentary on Question:

*This item tested a candidate's understanding of various elements relating to financial reporting for general insurance companies.*

### Solution:

(a) Compare assumed reinsurance to primary insurance for a general insurance company with respect to the following:

- Report lag for claims
- Reporting for lines of business
- Treatment of loss adjustment expenses (LAE)

### Commentary on Question:

*The solution below is an example of a full credit response. Note that the sentence in italics within parentheses is an alternative acceptable way to explain the LAE treatment for reinsurers.*

- Whatever the report lag is for a claim to the primary insurer, there will be an additional lag for the insurer reporting the claim to the assuming reinsurer.
- The line-of-business breakdown for assumed reinsurance is likely to be less granular than for primary insurance.

## 9. Continued

- (iii) Primary insurers pay all LAE. The treatment of LAE for assumed reinsurance is specified in the reinsurance contract. (*Most reinsurance contracts only include allocated LAE and exclude unallocated LAE.*)
- (b) Compare IFRS 17 and U.S. statutory accounting with respect to the balance sheet reporting of ceded claims liabilities, assuming that the ceded reinsurance transfers significant insurance risk.

### **Commentary on Question:**

*The solution below is an example of a full credit response.*

IFRS 17 presents ceded claim liabilities as an asset for reinsurance on the balance sheet. U.S. statutory accounting reduces the gross claims liabilities by the ceded amount presenting the liability for net claims.

- (c) Describe two sources of credit risk that exist for an insurer regarding its ceded claim liabilities.

### **Commentary on Question:**

*There are several different sources of credit risk for ceded claim liabilities. Only two were required for full credit. The solution below is an example of a full credit response.*

1. The risk that the reinsurer does not have the financial resources to pay the insurer for the ceded claims.
2. The risk that the reinsurer denies coverage to pay the ceded claims.

- (d) Identify the default measurement standard for the valuation of investments under IFRS 9.

Fair value through profit or loss (FVPL).

- (e) Describe the situation under IFRS 9 in which fixed-income securities do not use the default measurement standard. Include the standard that should be used in the situation you just described.

If they are to be “held-to-maturity”, then they are to be valued using amortization.

## **10. Learning Objectives:**

6. The candidate will understand the analysis of a general insurer's financial health.

### **Learning Outcomes:**

(6c) Understand solvency monitoring for general insurance companies.

(6d) Demonstrate knowledge of the EU Solvency II capital requirement.

### **Sources:**

General Insurance Financial Reporting Topics, Society of Actuaries, 5th Edition, 2021

- Chapter 12 (Solvency Monitoring)

### **Commentary on Question:**

*This item tested a candidate's understanding of the Solvency II approach to determining regulatory capital requirements for an insurance company.*

### **Solution:**

(a) Identify the statistic used to define each capital standard, and the required mathematical relation between the two standards.

- SCR: 99.5% Value at Risk over a 1-year time interval
- MCR: 85% Value at Risk over a 1-year time interval
- MCR must not be lower than 25% of the SCR or greater than 45% of the SCR.

(b) Describe two advantages and two disadvantages for using the Standard Formula.

### **Commentary on Question:**

*There are many advantages and disadvantages. Only two of each were required for full credit. The solution below is an example of a full credit response.*

#### Advantages of the Standard Formula

- It does not require the time and money required to obtain (or develop) and use an internal model.
- It does not require approval from the regulator to be used.

#### Disadvantages of the Standard Formula

- It was developed to be conservative. Internal capital models should provide a lower required capital.
- It does not consider insurer specific factors to calculate capital.

(c) Explain why a volume-weighted average was selected over a straight average across all companies.

## 10. Continued

**Commentary on Question:**

*There are several different reasons for this. The solution below is an example of a full credit response.*

A straight average would be close to that of small insurers, but their standard deviation of development is greatly affected by random fluctuation. This would overstate the standard deviation for medium and large insurers by a significant amount. A volume-weighted average ensures that the charge is more appropriate for medium and large insurers that make use of the formula.

(d) Describe how this dependency structure is applied in the formula.

**Commentary on Question:**

*The solution below is an example of a full credit response.*

All natural perils are assumed to be positively correlated. All man-made perils are assumed to have no correlation with each other. The total of all natural perils is assumed to have no correlation with the total of all man-made exposures.

## **11. Learning Objectives:**

7. The candidate will understand the standards of practice and professionalism required of the actuary.

### **Learning Outcomes:**

(7a) Describe, interpret and apply the IAA's professionalism principles.

(7b) Describe, interpret and apply Standards of Practice as defined by the International Actuarial Association (IAA).

(7d) Describe and apply the concept of materiality.

### **Sources:**

International Actuarial Association, IAA Risk Book: *Professional Standards*, Insurance Regulation Committee, May 2023

International Actuarial Association, International Standard of Actuarial Practice 1, *General Actuarial Practice*, Revision adopted Dec. 1, 2018

International Actuarial Association, International Standard of Actuarial Practice 4, *IFRS 17 Insurance Contracts*, Adopted Nov. 21, 2019

International Actuarial Association, IAA Risk Book: *Materiality, Proportionality and Similar Terms*, Insurance Regulation Committee, April 2023

### **Commentary on Question:**

*This item tested a candidate's understanding of actuarial standards of practice and the concept of materiality for actuarial work.*

### **Solution:**

(a) Compare actuarial standards of practice and regulations as they relate to the provision of actuarial services.

### **Commentary on Question:**

*There are many different valid responses possible. A full credit valid response was not required to compare every possible point of comparison. The solution below is an example of a full credit response.*

Standards of practice are usually produced by the local actuarial association, a separate standard setting authority while regulations are produced by a local jurisdiction's governing bodies with regulatory authority. Unlike regulations which must be followed, standards need not be followed in unique circumstances or when following them would be in contradiction with regulations.

## 11. Continued

(b) Describe the role of the IAA's ISAPs.

**Commentary on Question:**

*The solution below is an example of a full credit response.*

ISAPs are model standards and are not binding unless referenced in a local jurisdiction's standards. Additionally, if an actuary states compliance with an ISAP they are bound by that ISAP.

(c) Describe the situation in which the actuary does not determine the materiality standard, as stated in ISAP 1, *General Actuarial Practice*.

This is when the materiality standard is imposed by another party such as the principal or the auditor.

(d) Describe the limitation on the size of the selected materiality standard as stated in ISAP 4, *IFRS 17 Insurance Contracts*.

It should not be greater than the entity's threshold of materiality.

(e) Describe two potential pitfalls with the application of materiality.

**Commentary on Question:**

*There are several potential pitfalls. Only two were required for full credit. The solution below is an example of a full credit response.*

1. A common danger regarding materiality is applying it in too granular a fashion.
2. An assumption that an item considered immaterial in the past will remain immaterial.

(f) Describe how the PoP applies to actuarial services.

**Commentary on Question:**

*There are several valid descriptions. The solution below is an example of a full credit response.*

Actuarial work should be “proportionate” to the scope of the decision to which the work relates, or the benefit that is expected to be obtained.

## 12. Learning Objectives:

6. The candidate will understand the analysis of a general insurer's financial health.

### Learning Outcomes:

(6e) Demonstrate knowledge of ORSA.

### Sources:

International Actuarial Association, IAA Risk Book: *Own Risk Solvency Assessment*, Insurance Regulation Committee, May 2023

International Actuarial Association, Deriving Value from ORSA: Board Perspective, April 2015

General Insurance Financial Reporting Topics, Society of Actuaries, 5th Edition, 2021

- Chapter 12 (Solvency Monitoring)

### Commentary on Question:

*This item tested a candidate's understanding of ORSA including its benefits and limitations.*

### Solution:

(a) Describe what an ORSA is intended to provide.

### Commentary on Question:

*There are many different valid responses possible. A full credit valid response was not required to detail every aspect of what ORSA provides. The solution below is an example of a full credit response.*

An insurer's assessment of its position on capital, both now and in the future, under different scenarios and relative to the company's appetite for risk.

(b) Describe the benefit of ORSA reporting to the following parties regarding an insurer:

- (i) Board of Directors
- (ii) Senior Management
- (iii) Employees
- (iv) Regulators

### Commentary on Question:

*There are several different valid benefits possible for each party. A full credit valid response was not required to detail every benefit to a party. The solution below is an example of a full credit response.*

## 12. Continued

- (i) Provides valuable information to the Board for decision making.
- (ii) Provides senior management with a detailed look at the company's current and evolving risk profile given the capital resources available that can improve planning
- (iii) Builds awareness of risk for the company and the benefits of risk management.
- (iv) Provides regulators with additional insight into the risks taken on and the risk management utilized by the company.

(c) Describe what is referred to in each of these risks for an ORSA process.

### **Commentary on Question:**

*There are several different valid responses possible for each limitation. The solution below is an example of a full credit response.*

#### Risk of Incompleteness

- A predefined process can deal only with known unknowns. Unknown unknowns are virtually impossible to include. Also, there is a focus on past events instead of performing true forward looking risk assessments.

#### Risk of Unnecessary Complexity

- Arises when a company commits too much time and effort overanalyzing an extreme number of risks that they are overwhelmed by the information, unable to make timely decisions.