

Exam GI 302

Date: Friday, March 27, 2026

INSTRUCTIONS TO CANDIDATES

General Instructions

1. This examination has 11 questions numbered 1 through 11 with a total of 50 points.

The points for each question are indicated at the beginning of the question.

2. While every attempt is made to avoid defective questions, sometimes they do occur. If you believe a question is defective, the supervisor or proctor cannot give you any guidance beyond the instructions provided in this document.

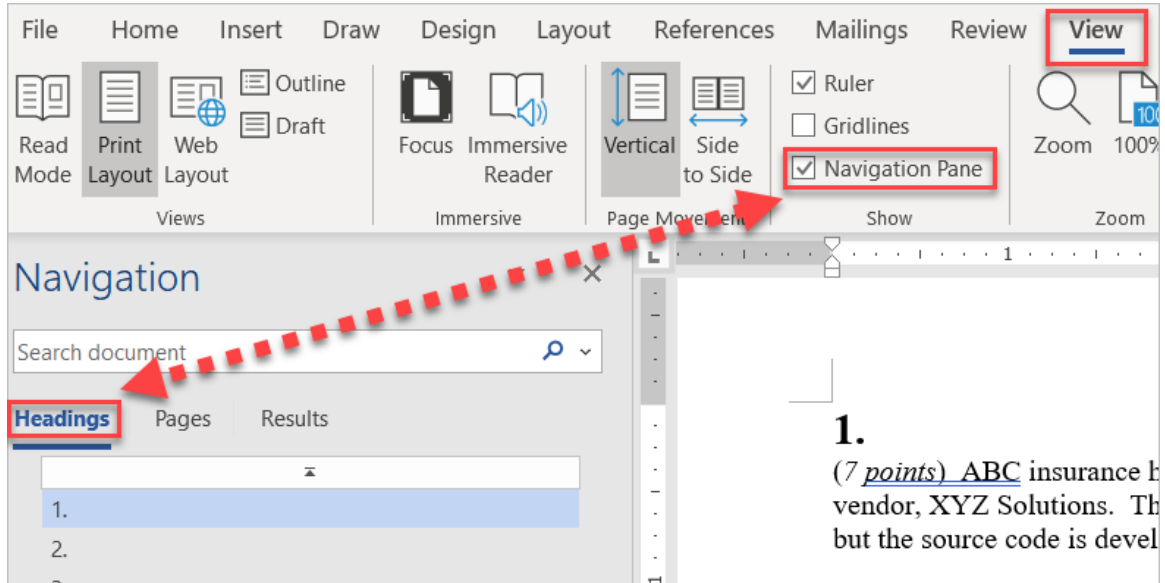
Written-Answer Instructions

1. Each question part or subpart should be answered either in the Word document or the Excel file as directed. Graders will only look at work in the indicated file.
 - a) In the Word document, answers should be entered in the box marked ANSWER. The box will expand as lines of text are added. There is no need to use special characters or subscripts (though they may be used). For example, β_1 can be typed as beta_1 and σ^2 can be typed as sigma^2.
 - b) Calculations should be done in Excel and entered as formulas. Performing calculations on scratch paper or with a calculator and then entering the answer in the cell will not earn full credit. Formatting of cells or rounding is not required for credit. Rows can be inserted to the answer input area as required to provide space for your answer.
 - c) Individual exams may provide additional directions that apply throughout the exam or to individual items.
2. The answer should be confined to the question as set.
3. Prior to uploading your Word and Excel files, each file should be saved and renamed with your unique candidate number in the filename.
4. The Word and Excel files that contain your answers must be uploaded before the five-minute upload period expires.

Navigation Instructions

Open the Navigation Pane to jump to questions.

Press Ctrl+F, or click View > Navigation Pane:



1.

(3.5 points) One of the landmark developments in the evolution of U.S. insurance regulation has been the 1944 U.S. Supreme Court decision regarding the South-Eastern Underwriters Association (SEUA).

- (a) (1 point) Explain why regulators at the time found the existence of such associations to be in the public interest.

ANSWER:

An investigation of SEUA activities resulted in federal criminal indictments for many activities that the SEUA engaged in.

- (b) (1 point) Describe two such SEUA activities.

ANSWER:

- (c) (1.5 points) Describe the three main conclusions of the U.S. Supreme Court's decision.

ANSWER:

2.

(4 points)

- (a) (1.5 points) Critique the following statement:

The U.S. insurance regulatory system's goal for solvency regulation should be to set capital requirements such that insurer insolvencies will not occur.

ANSWER:

In order to maintain effective regulation, the regulatory system must have the requisite authority. According to the *U.S. National State-Based System of Insurance Regulation and the Solvency Modernization Initiative*, the preconditions for this requisite authority are comprised of eight elements.

- (b) (1 point) List four of these elements.

ANSWER:

The NAIC's *Model Supervision Act* authorizes insurance commissioners to place insurers under administrative supervision.

- (c) (1.5 points) Explain the following with respect to placing an insurer under administrative supervision.

- (i) Purpose of this regulatory action

ANSWER:

- (ii) Effect on the insurer's operations, including two specific examples

ANSWER:

3.

(4 points) The Insurance Services Office Commercial General Liability (ISO CGL) policy splits coverage into three parts.

- (a) (1 point) Describe the coverages provided by the two parts in which the claimant is a third party.

ANSWER:

Consider the following event in which there is coverage provided by an ISO CGL policy.

- XYZ Electrical Services was hired to update the wiring in an older home.
 - On June 18, 2025, an electrician employed by XYZ noticed that there was a section of wiring connections hidden behind a beam and inaccessible.
 - Properly updating this section of wiring would involve extra time and additional expenses for a job that was supposed to finish in one day.
 - The XYZ electrician completed the wiring in that section improperly so that the job would be finished on time. The improper wiring in that section was concealed so that it would pass inspection the next day.
 - On July 21, 2025, a fire destroyed the property.
 - Fire investigators quickly determined that the fire started from the area that included the improperly updated section of wiring.
 - XYZ was sued by the property owner and was found liable for the destruction of the home.
 - XYZ's owner switched insurers for the July 1, 2025 renewal.
 - ANT Insurance provided XYZ an occurrence coverage ISO CGL policy running from July 1, 2024, to June 30, 2025.
 - BEE Insurance now provides this coverage in an occurrence coverage ISO CGL policy running from July 1, 2025, to June 30, 2026.
 - The named insured for both policies is XYZ's owner/manager and XYZ's supervisors.
- (b) (1.5 points) Create, without changing the facts provided, a scenario under which the policy provided by ANT Insurance should pay the claim including an explanation as to why it should.

ANSWER:

3. Continued

- (c) (1.5 points) Create, without changing the facts provided, a scenario under which the policy provided by BEE Insurance should pay the claim including an explanation as to why it should.

ANSWER:

4.

(4 points)

(a) *(1 point)* Some general insurance products pay dividends to policyholders.

(i) List two general insurance lines of business in the United States in which policyholders can receive dividends from an insurer.

ANSWER:

(ii) Identify the formula for calculating an insurer's incurred policyholder dividends that are to be reported in the statutory annual financial statements.

ANSWER:

(b) *(3 points)* Compare the recognition of policyholder dividend liability between year-end and the day dividends are declared under U.S. GAAP and U.S. Statutory Accounting Principles (SAP).

ANSWER:

5.

(5 points) Describe the admitted/nonadmitted treatment of the following assets under U.S. Statutory Accounting Principles (SAP), and the rationale for that treatment, in the table below. *Note that in the table below, the first asset is shown as an example.*

Asset	Treatment of Asset	Rationale for Treatment
<i>EDP and operating system software</i>	<i>Admitted, but the admitted amount is limited to 3% of surplus. Any amount excess of this is nonadmitted.</i>	<i>This asset cannot be used to pay claims but treating it as fully nonadmitted might discourage insurers from upgrading their systems. Upgrading systems should be encouraged.</i>
Deferred tax assets		
Material assets, not held as investments		
Reinsurance recoverables		
Investments in common stock		

*Questions 6 and 7 pertain to the Case Study.
Each question should be answered independently.*

6.

Provide the response for this question in the Excel spreadsheet.

(5 points) R-Dan's appointed actuary, Sue Calvin, selected a materiality standard of \$14.5 million for R-Dan's Statement of Actuarial Opinion (SAO) as of Dec. 31, 2024. R-Dan's external auditor selected a materiality standard of \$21 million for their audit of the year-end 2024 Annual Statement.

- (a) (2 points) Evaluate the differing materiality standards for R-Dan's statutory financial results as of year-end 2024.

There are several high-level adjustments that can be made to statutory surplus to estimate GAAP equity. However, not all the information needed for these adjustments is in the statutory statements.

- (b) (3 points)
- (i) State the formula for approximating GAAP Equity when limited to only using the statutory annual statement pages provided in the Case Study.
 - (ii) State the assumptions underlying your formula in (i). Justify your assumptions.
 - (iii) Approximate R-Dan's GAAP Equity, using R-Dan's statutory annual statement as of December 31, 2024.

**Questions 6 and 7 pertain to the Case Study.
Each question should be answered independently.**

7.

Provide the response for this question in the Excel spreadsheet.

(7.5 points) An actuary from R-Dan's external auditor, L.J. Baley, conducted a review of R-Dan's Statement of Actuarial Opinion (SAO), Actuarial Opinion Summary (AOS), and Actuarial Report (AR).

L.J.'s review made the following critical points:

- I. The actuarial work lacked any peer review. Sue should have hired an independent peer reviewer for the work.
- II. The report lacked any detail regarding the estimate for gross reserves. Furthermore, Sue's gross IBNR estimate is approximately equal to the net IBNR estimate. This should not be possible.
- III. A reserve analysis conducted by L.J. and reviewed by another qualified actuary noted that Sue's estimate of net IBNR and its range are actuarially sound. However, the ceded IBNR central estimate should be \$31.5 million, which also affects the gross IBNR estimate.
- IV. The SAO Relevant Comments are unacceptable as the reinsurance commentary does not describe the reinsurance in place and the RMAD commentary does not mention increasing inflation.

L.J. intends to send this review to the regulators, the Actuarial Standards Board (ASB) and Sue.

- (a) (4 points) Identify which of the critical points listed would be actionable by either the regulators or the ASB, providing a justification for your decision on each critical point.
- (b) (1 point) Verify the assertion in II that "Sue's gross IBNR estimate is approximately equal to the net IBNR estimate."

Assume that point III is correct, Sue's estimate of net reserves is actuarially sound, but the ceded and gross estimates are not. Additionally, assume that the difference between the low-end and high-end of the gross reserves range of reasonability is \$70 million.

- (c) (1 point) Assess what should be changed in the *Opinion* section of the SAO (bottom of page 32 in the Case Study) given these assumptions.
- (d) (1.5 points) Derive the proper amounts for the table in the AOS (page 35 in the Case Study).

8.

Provide the response for this question in the Excel spreadsheet.

(4.5 points) PC General Insurance (PCGI), domiciled in the United States, only cedes business to F-Re, an unaffiliated reinsurance company. The business ceded is not for any type of insurance pool.

The following information is available for PCGI's cessions to F-Re as of December 31, 2024. [Note: RR = Reinsurance Recoverable, RP = Reinsurance Payable]

Item from PCGI Statutory Annual Statement	Amount (\$000)	Schedule F Part 3
Reinsurance Premiums ceded	3,255	Col 6
RR on Loss & LAE Paid	1,770	Sum of Cols 7 & 8
RR on Loss & LAE Reserves [Case + IBNR]	3,950	Sum of Cols 9 to 12
RR on Unearned Premiums & Contingent Comm.	371	Sum of Cols 13 & 14
Amounts in Dispute in RRs above	521	Col 16
RP on amounts due to reinsurers	278	Sum of Cols 17 & 18
Funds Held by Company under Reinsurance Treaties	7	Col 20
Total Collateral	824	Sum of Cols 21, 22 & 24
RR on Paid Loss & LAE Current	478	Col 37
RR on Paid Loss & LAE Overdue 1 – 29 days	372	Col 38
RR on Paid Loss & LAE Overdue 30 – 90 days	301	Col 39
RR on Paid Loss & LAE Overdue 91 – 120 days	230	Col 40
RR on Paid Loss & LAE Overdue Over 120 days	389	Col 41
Amounts in Dispute included in Total RR Paid Due	273	Col 44
Amounts in Dispute included in Cols 40 & 41	238	Col 45
Amounts Received Prior 90 Days	286	Col 48

Calculate PCGI's Schedule F provision as of December 31, 2024, under each of the following scenarios.

- (i) F-Re is Unauthorized (not certified)
- (ii) F-Re is Authorized

9.

(6 points) Astrid Khoury, a fully qualified general insurance actuary in the United States, is a consultant for BDF General Insurance and is BDF's appointed actuary. BDF writes commercial multi-peril, fire, allied lines and liability insurance policies.

While preparing the 2024 Statement of Actuarial Opinion (SAO), Astrid finds a discrepancy between Schedule P - Part 1 and Part 2 data. Astrid's estimate of loss and loss adjustment expense reserves (L&LAE) is based on Part 2 data, as noted in the Actuarial Report. Astrid also observed that none of BDF's L&LAE reserves are discounted, so reserve discounting was not the cause of the discrepancy. The discrepancy affects calendar year 2024 paid losses and written premium for liability lines of business such that the amounts from Part 1 exceed those from Part 2.

The discrepancy exceeds the materiality standard selected by Astrid for BDF's SAO, but it does not exceed the materiality standard applied by the auditor of BDF's Annual Statement. BDF's auditor determined that this discrepancy does not warrant any action.

- (a) (4 points) Evaluate Astrid's responsibilities regarding the SAO in this situation considering any applicable Actuarial Standards of Practice (ASOPs) and the American Academy of Actuaries practice note (AAA PN) on *Statements of Actuarial Opinion on Property and Casualty Loss Reserves*.

ANSWER:

BDF's booked reserves are slightly below (less than 0.5%) the low end of Astrid's selected range of reasonability. Their auditor proposes that Astrid should produce the SAO with a reasonable opinion by making the range of reasonable reserves larger to account for the variability from data issues. The auditor notes that SAO could include a disclosure of the data issue. The booked reserves would then be in the range of reasonability under this proposal.

- (b) (2 points) Evaluate how Astrid should respond to this proposal.

ANSWER:

10.

(3 points) The Relevant Comments section of the Statement of Actuarial Opinion (SAO) provides important information relevant to the actuary's opinion on reserves. In this section, the actuary must include paragraphs that address six specified topics. The first three topics are:

- Company-Specific Risk Factors
- Risk of Material Adverse Deviation (RMAD)
- Other Disclosures in Exhibit B

The *Other Disclosures in Exhibit B* commentary must address five specified topics plus any other topics the actuary could include if the actuary believes them to be significant and they are not addressed elsewhere in the Relevant Comments section.

- (a) (1.5 points) Identify the following regarding the *Other Disclosures in Exhibit B* commentary:
- Three of the specified topics that must be addressed
 - Three other topics that could be addressed

ANSWER:

(i)1:

(i)2:

(i)3:

(ii)1:

(ii)2:

(ii)3:

The SAO does not include the actuary's estimate of reserves nor the range of reasonability for reserves.

- (b) (1.25 points) Explain why these are not included in the SAO.

ANSWER:

- (c) (0.25 points) Identify a reason that the Actuarial Report is to include a section titled *Extended Comments*.

ANSWER:

11.

(3.5 points) In the United States, an insurer must file the Reinsurance Attestation Supplement (RAS) annually.

- (a) (2 points) State the correct wording within the to complete each of the following statements regarding the RAS:
- (i) The RAS is filed as a supplement to the .
 - (ii) The RAS is attested by the for the company and applies to the company's ceded reinsurance contracts.
 - (iii) Documentation for the RAS is required to be kept by management for all ceded reinsurance contracts in which .
 - (iv) The purpose of the RAS documentation is to show for the contracts identified in part (iii) above.

ANSWER:

(i):

(ii):

(iii):

(iv):

Documentation for the RAS should include several items to support the determination of risk transfer.

- (b) (1.5 points) Identify three of these items.

ANSWER:

****END OF EXAMINATION****