

## SOA GI Track Volunteers

Item 11 - SOA GI Track  
Volunteers

This document provides a sample of up to 5 individuals with the greatest participation in writing and grading each SOA General Insurance Fellowship track specific exam.

### SOA Exam Process

The process that is followed for each SOA General Insurance Fellowship track specific exam is divided into the item writing process (i.e. creation of each exam), and the grading process.

#### *Item Writing Process*

Each item writer submits preliminary questions for review, along with a grading rubric outline considering all possible solutions to the question. The exam chair does an initial review of the questions to ensure consistency and relevance to the syllabus material. At this point, the exam chair maintains the master copy of all questions and solutions and any changes to the questions and solutions are made from that copy. All preliminary questions are reviewed at a Pre-Review face-to-face meeting. Each exam chair as well as each individual listed for each exam below are in attendance. The General Insurance track General Officer (GO) also attends. In addition to this, all item writers for an exam are encouraged to attend the pre-review. Each exam chair is also involved in the review of the other exams to ensure consistency with the question approach with their own exam. The General Officer has the overall responsibility for each exam to ensure the quality of each question and also that each exam committee meets the SOA standards that all SOA Fellowship tracks must follow. The GO for the General Insurance Fellowship track has over 20 years of experience volunteering for the SOA for exam committees leading to his current role as GO. He is an FSA and MAAA with over 35 years of actuarial work experience.

Following Pre-Review, the exam committee has approximately 2 months until the Central Review meeting. During this period, the committee members revise questions reviewed at Pre-Review, create new questions to fill any gaps in syllabus coverage identified at Pre-Review, and further review the revisions and new questions. Grading rubric solutions are revised as needed for any revised question. The rubric solution is used as a means to ensuring the question matches the solution. The exam chair then submits the questions to the SOA office for formatting into the SOA template. This forms the master copy of the questions. In creating the exam, the exam committee ensures appropriate coverage of syllabus topics and questions of varying cognitive levels. The exam is constructed with a level of difficulty so that the *a priori* pass mark is within the range of 55% to 65%. It is also a goal of the exam creation process that there be adequate time for candidates to respond to all of the questions in the time allotted.

Central Review is another face-to-face meeting where all questions are once again reviewed, with the same attendees as Pre-Review. In addition, one SOA Board member attends the General Insurance Central Review meeting as an independent observer to help ensure consistency with each exam, both internal consistency and consistency with the SOA standards that all SOA Fellowship tracks must follow. The outcome of Central Review is a complete exam. Following Central Review, only minor edits to questions are made (e.g. a part may be added or removed from a question). The rubric solution is then revised as needed. The exam chair continues to maintain the master copy of all questions and then chooses the question order for the exam. Each master copy of the exam is then checked in detail by each exam chair, the General Officer, and at least one exam committee member. Once the master copy is signed off, a sample print booklet is created. Once again, all exam chairs, the General Officer and at least one exam committee member scrutinize and sign off. The exam is then released for printing all booklets. One printed booklet is then reviewed by the exam chair and the General Officer as a final check. While no system is foolproof, there have been no defective questions identified in any of the SOA GI exams offered to date.

### *Grading Process*

An initial estimate of the minimum adequate knowledge mark for each question is selected by the exam chair using input from the item writers and graders before grading commences. The sum of all of these marks is used to set the preliminary pass mark. For the SOA General Insurance Fellowship track, all candidate responses are graded twice, by separate graders. Each grader is assigned specific questions to grade and they grade all candidate responses for those questions. Each grader uses the grading rubric to assign the grade for each candidate and considers alternative solutions that are not already identified in the rubric. Each such solution is reviewed by the exam chair along with the graders assigned to that question to determine the grading rubric that is appropriate for the alternative solution. The grading rubric is then revised to include the additional alternative solution. The average of the grader scores is determined and used to establish an initial exam grade for each candidate. No further grading is done for all papers well above or well below the preliminary pass mark (i.e. these papers are either a clear pass or a clear fail). Of the remaining papers, a complete reconciliation between the 2 graders is done and a final mark is determined for each candidate. The final pass mark is set to properly distinguish between candidates who have a comprehensive enough understanding of the syllabus material and candidates who still have significant gaps in their understanding of the syllabus material. This process also takes into account any issues raised during the grading process that would warrant any modification to the preliminary pass mark. The exam chair provides the GO with a report outlining the rationale for the setting of the pass mark. The GO reviews the rationale to ensure that it meets SOA standards for all exams. This report must be approved by the GO and the SOA Examination Chair to ensure consistency between tracks and that SOA guidelines are followed. If results are outside expected (confidential) ranges, the Board Partner must also be alerted and sign off.

Top SOA GI Track Exam contributors

Introduction to Ratemaking and Reserving Exam				
	Role	Years of Actuarial Experience	Work Bio	Education Bio
Full time SOA employee	Exam Chair, question writer, question reviewer, grader	20	15 years of P&C insurance experience. Experience in both pricing and reserving.	FSA, FCIA, FCAS Instructor for 4th year university course on P&C ratemaking for 6 years; Reviewer for 3rd edition and co-author of 4th edition of Introduction to Ratemaking and Loss Reserving for Property & Casualty Insurance; Editor for Fundamentals of General Insurance Actuarial Analysis SOA textbook.
Volunteer	Question reviewer, grader	30	30 years of P&C insurance experience and has served in various roles with major P&C insurers as well as in P&C consulting practices including Chief Actuary of one of the largest Canadian Insurers	FSA, FCIA, MAAA, FCAS <i>Author of Estimating Unpaid Claims Using Basic Techniques (CAS) textbook and Fundamentals of General Insurance Actuarial Analysis (SOA) textbook.</i> Assumed leadership role in the development of numerous papers on diverse subjects including water damage risk and the pricing of property insurance, operational risk, economic capital modeling, catastrophe modeling, and a wide range of financial reporting subjects. Active in the development of actuarial standards of practice, within Canada and internationally; active volunteer for the CIA, IAA, CAS, and SOA, with particular focus on educational matters and international financial reporting standards.
Volunteer	Question writer, question reviewer, grader	25	Over 25 years of P&C insurance experience. Experience in pricing, reserving, and reinsurance.	MAAA, FCAS, CPCU 25 years of volunteer work for CAS exam committees including 10 years as a chair. Member of numerous task forces and working groups on actuarial education issues. Published four papers/discussions of papers in the <i>PCAS</i> .
Volunteer	Question writer, question reviewer, grader	30	35 years of P&C insurance experience. Experience in pricing, reserving, M&A, reinsurance, insurance regulation, financial risk and risk management.	MAAA, FCAS Many years of volunteer experience for various actuarial organizations including the SOA, CAS, IFoA, IAA, and CAA. Presented on P&C actuarial topics numerous times for various actuarial organizations.
Volunteer	Question writer, question reviewer, grader	20	15 years of P&C insurance. Experience in pricing, reserving, audit and captives.	FIA, FSA, ACAS, FCCA, ACIB Former lecturer in Quantitative Analysis for ACCA exams, former member of SOA Examination Committees in Finance & Investments, currently lecturer in Insurance Accounting for final year BSc in Risk Management & Insurance, frequent presenter on application of international accounting, actuarial and regulatory standards in developing markets. Involved in several educational and developmental initiatives including Actuaries Without Borders and IAA Advice & Assistance Committee.

<b>Financial and Regulatory Environment Exam</b>				
	<b>Role</b>	<b>Years of Actuarial Experience</b>	<b>Work Bio</b>	<b>Education Bio</b>
Full time SOA employee	Exam Chair, question writer, question reviewer, grader	20	Over 25 years of P&C insurance experience. Experience as an expert witness, appointed actuary, rate filing actuary, pricing actuary and risk management actuary.	FSA, FCIA, FCAS 10 years of volunteer work for CAS exam committees, including several years as a question writer and grader, 3 years as an exam chair, and a year as the pass mark panel chair. Editor and co-author of the SOA textbook "General Insurance Financial Reporting Topics". Author of the several SOA P&C actuarial study notes.
Volunteer	Question writer, question reviewer, grader	25	Over 25 years of P&C insurance experience. Experience in pricing, reserving, and reinsurance.	MAAA, FCAS, CPCU 25 years of volunteer work for CAS exam committees including 10 years as a chair. Member of numerous task forces and working groups on actuarial education issues. Published four papers/discussions of papers in the <i>PCAS</i> .
Volunteer	Question writer, question reviewer, grader	35	Over 40 years of P&C insurance experience. Experience includes insurance company chief actuary, appointed actuary, rate filing and ratemaking actuary, risk management actuary, actuarial expert witness (including one case before the US Supreme Court) and insurance regulator (served on the NAIC CATF.)	FSA, MAAA, FCAS, FCA, CPCU, ARM-E, ARe, AIC, CIDM, M.S. Co-author of the Insurance Accounting & Systems Association's textbook "Property-Casualty Insurance Accounting", Chapter 3, "Estimating Liabilities for Losses and Loss Adjustment Expenses," 6 <sup>th</sup> through 8 <sup>th</sup> editions. Co-developer of Actuarial Standard of Practice (ASOP) 36 "Statements of Actuarial Opinion Regarding Property/Casualty Loss and Loss Adjustment Expense Reserves", (2000.)
Volunteer	Question writer, question reviewer	10	Limited P&C insurance experience. 10 years of actuarial experience as Senior Life Actuary working for a state Department of Insurance. Experience with insurance regulation, insurance laws and insurance rate filings.	FSA, MAAA, Ph.D. (Statistics and Econometrics) , CFA Many years of SOA and AAA volunteer work. Volunteer experience as exam question writer, grader and member of teams producing Practice Notes (Credibility, Required Capital, Actuarial Practices Relating to Preparing, Reviewing, and Commenting on Rate Filings.)
Volunteer	Question writer, question reviewer	10	10 years of P&C insurance experience in the agriculture sector (government provision of agriculture insurance) including 5 years as the Chief Actuary. 5 years of experience in pricing group benefits for the government's Employment Insurance program.	FSA, FCIA 10 years of volunteer work with the CIA for the Eligibility and Education Council including 5 years as the Vice Chair and Chair of the Eligibility Committee and recently appointed as the vice chair of the Council.

Advanced Topics Exam				
Volunteer	Role	Years of Actuarial Experience	Work Bio	Education Bio
Full time SOA employee	Exam Chair, Item writer, question reviewer, grader	40	35 years University teaching, 5 years SOA staff fellow.	FSA, CERA, Ph.D. (Statistics) Numerous papers (and textbooks) on credibility and statistical applications. Author of one the papers used on the exam.
Volunteer	Item writer, question reviewer, grader	25	Over 25 years of P&C insurance experience. Experience in pricing, reserving, and reinsurance.	MAAA, FCAS, CPCU 25 years of volunteer work for CAS exam committees including 10 years as a chair. Member of numerous task forces and working groups on actuarial education issues. Published four papers/discussions of papers in the <i>PCAS</i> .
Volunteer	Item writer, question reviewer, grader	20	15 years of P&C insurance. Experience in pricing, reserving, audit and captives.	FIA, FSA, ACAS, FCCA, ACIB Former lecturer in Quantitative Analysis for ACCA exams, former member of SOA Examination Committees in Finance & Investments, recently appointed as lecturer in Insurance Accounting for final year BSc in Risk Management & Insurance, frequent presenter on application of international accounting, actuarial and regulatory standards in developing markets. Involved in several educational and developmental initiatives including Actuaries Without Borders and IAA Advice & Assistance Committee.

#### Notes

- Years of Actuarial Experience is measured from attainment of the first actuarial designation and rounded to five years.
- First actuarial designation includes ASA and ACAS.
- Any years noted in the work and education bios are rounded to five years.
- Years noted in the work bio may include experience before first actuarial designation.
- The information in the tables above was also requested for the Financial Economics (FE) Module. it was not included for the following reasons:
  - FE module topics are not used to meet any regulatory requirements,
  - FE module topics are broad and not specific to the general insurance track (it applies to four of the six Fellowship specialty tracks),
  - FE module test and exercise are not published due to the nature of module offerings (FE modules are taken by candidates individually at their convenience and questions are drawn from a bank of questions), and
  - FE module assessment is confidential.