



Post Exam Summary

Fall 2023

This is the second time that the CAS is releasing a Post Exam Summary, and the first time insights are being provided for Exam 6 International and Exam 8. This resource is designed to provide candidates with insightful observations on candidates' exam performance, coupled with expert recommendations for improvement. The post-exam summary comprises a general summary section that applies universally to all constructed response exams, followed by individual sections for each of the exams administered during the last sitting. We will continue to expand on this format and enhance the summary in the future.

General Observations and Study Tips:

- Candidates should note that the instructions to the exam explicitly say to show all work; graders expect to see enough support on the candidate's answer sheet to follow the calculations performed. While the graders make every attempt to follow calculations that were not well-documented, lack of documentation may result in the deduction of points where the calculations cannot be followed or are not sufficiently supported. Candidates can reference ["An Open Letter from a CAS Grader"](#) for additional insights.
- Incorrect responses to one part of a question did not preclude candidates from receiving credit for correct work on subsequent parts of the question that depended upon that response.
- Candidates should be cognizant of the way an exam question is worded. They must look for key words such as "briefly" or "fully" within the problem. We refer candidates to the *Future Fellows* article from December 2009 entitled ["The Importance of Adverbs"](#) for additional guidance on this topic.
- Some candidates provided lengthy responses to a "briefly describe" question, which does not provide extra credit and only takes up additional time during the exam.
- It should be noted that all exam questions have been written and graded based on information included in materials that have been directly referenced in the official Syllabus and exam specific content outlines, which are located on the CAS website. The CAS takes no responsibility for the content of supplementary study materials and/or manuals produced by third parties and/or individuals which are not directly referenced in the official Syllabus.

- Candidates should be prepared for questions covering all tasks on the content outline or syllabus, including topics that may not be tested every exam sitting. Candidates have historically performed poorly on some topics that are tested less regularly (such as calculating and evaluating unallocated loss adjustment expense).

Exam 5 Specific Comments:

- When prompted to provide multiple items in a response (e.g., “identify two constraints” or “recommend four changes”), candidates should make sure to list items that are unique. If items listed are too similar, then the graders can only award credit for one item.
- Candidates should take care when copying and pasting in the test environment to ensure that formulas are working as desired. Cell references, including anchoring, should be confirmed.
- Some candidates had difficulty correctly calculating off-balance factors to determine the impact of rating factor changes and applying the off-balance factors to determine proposed base rates.
- Many candidates struggled applying the classical technique to estimate unpaid unallocated loss adjustment expense when given information on paid claims and paid ULAE.
- Candidates had difficulty adjusting paid claims in order to apply the Berquist-Sherman technique to estimate unpaid claims.
- Many candidates were not able to describe situations in which the Bornhuetter-Ferguson method is preferred to the expected claims method for estimating unpaid claims.

Exam 6 Canada Specific Comments:

- A portion of candidates chose not to tackle the employment insurance question. Despite its manageable level of difficulty, it appears that some candidates may benefit from devoting some attention to this topic in their studies.
- Candidates should make sure to fully review the Excel appendices of the educational notes. It was observed that many candidates struggled with risk adjustment calculation using cost of capital method based on the IFRS 17 education notes.
- Some candidates struggled with fulfillment cashflow calculation for an IFRS 17 question. Specifically, candidates failed to calculate the loss cost as the multiplication of frequency and severity and failed to correctly include the expense components in the calculation.

- Some candidates had difficulty listing out the principles of risk transfer. In addition, candidates had difficulty performing qualitative assessments for risk transfer.
- Some candidates had difficulty recalling elements that the appointed actuary should consider when taking responsibility for another person's work.

Exam 6 United States Specific Comments:

- Candidates struggled with content related to regulatory review of predictive models and are encouraged to review the Casualty Actuarial and Statistical Task Force paper "Regulatory Review of Predictive Models White Paper."
- Many candidates struggled with the components and calculations contained within different aspects of the balance sheet, such as Cash, Unearned Premium, and Surplus.
- Many candidates struggled with assessing whether reinsurance passed risk transfer under different methodologies.
- Candidates struggled to recall complete descriptions of reasons for different opinion types in the Statement of Actuarial Opinion as well as the required disclosures associated with those opinions.

Exam 6 International Specific Comments:

- A number of candidates did not understand microinsurance and did not fully understand the most important concept of microinsurance.
- Some candidates experienced difficulty in articulating the benefits of flood insurance. They were unable to explain the advantages of offering flood insurance through a mandatory bundled policy as opposed to a voluntary stand-alone policy
- Some candidates had trouble understanding the question about the characteristics of risk adjustments.
- Candidates should make sure to fully review the Excel appendices of the papers. It was observed that many candidates struggled with IFRS 17 calculations from the illustrative example in the IFRS 17 study note.

- Some candidates had difficulty with professionalism guidelines. Several specific areas where some candidates struggled include responsibilities of the Actuarial Function Head (AFH) and what actions are required if the AFH relies on other people's work.
- Candidates faced challenges with questions related to disclosure.

Exam 8 Specific Comments:

- Candidates should familiarize themselves with the Pearson VUE environment before taking the exam. Candidates should not expect all formulas and spreadsheet functionality to work in a similar fashion to other software. Common mistakes include unexpected results from using the MIN function with empty cells, incorrect anchored references, and array sums with incorrect rows or columns.
- While there is no explicit sort functionality, candidates can use the SMALL or LARGE functions to sort.
- Graders make every effort to locate cells with solutions, but some candidates construct obscure responses within the grey question area. Candidates should attempt to organize their solution independently from the grey question area, and format their solution to assist graders with identifying and assigning credit accordingly.
- Candidates should list all assumptions within their solutions. Some candidates thought certain questions were defective, but described their assumptions in the survey instead of within their response. Candidates should be mindful that graders can only award credit based on candidate responses, and not information included in the survey.
- Candidates demonstrated a good understanding of the subject matter from the various readings, and should continue to rely on all source material (including any case studies) in their exam preparation.
- Candidates can refer to all study kit materials during the exam. At the time of publishing, this includes the ISO CGL Experience & Schedule Rating Plan Manual and both the NCCI Experience Rating Plan Manual and Retrospective Rating Plan Manual. Candidates are not required to memorize the details but will be expected to be able to use them on the exam.
- Candidates found it challenging to use multi-dimensional credibility concepts to answer exam questions that had a different setup and context than the examples in the source material. As a reminder, candidates are expected to apply concepts from the source material to solve real-world ratemaking problems.