FUTURE CAS FELLOWS

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Integrative Questions (IQs) – Coming Soon to Exam 9

By Aadil Ahmad, FCAS, Examination and Syllabus Committee General Officer

In an effort to further improve the relevance and efficacy of CAS exams and test candidates' ability to apply and synthesize syllabus materials, the CAS Examination and Syllabus Committee will adopt a recommendation by the CAS Board of Directors and gradually move to a more integrative testing framework. Integrative Questions, or IQs, will require candidates to understand multiple facets of the syllabus material and concepts in addressing complex business problems.

How is an IQ different than a typical exam question?

An IQ will differ from a typical exam question in three significant ways. First, it will be worth a lot more points. To put it another way, each IQ could be worth around 10% to 15% of the total exam. Second, each IQ will require the candidate to draw from multiple syllabus learning objectives in order to answer the question (hence the word "integrative"). Finally, IQs will naturally test at a higher average Bloom's level than a standard exam question.

Which exams will be affected?

Exam 9 will feature one IQ on the Spring 2017 exam, worth about 10% to 15% of the exam. Similarly, Exam 8 will feature one IQ on the Fall 2017 exam and Exam 7 will feature one IQ on the Spring 2018 exam. The number of IQs that will appear on these exams will gradually increase over time.

We are still considering whether to extend this approach to Exams 5, 6US and 6C. However, candidates already have some experience with IQs to a limited extent, in the sense that Exam 5 often features a full rate indication item that blends testing of reserving and ratemaking concepts.

Please note that there will be fewer exam questions overall to account for the presence of IQs in order to avoid any increase in the time length of the exam.

Will you be releasing sample IQs?

Yes. Exam 9 will be releasing a few sample IQs in January as a study aide for candidates to help prepare for the exam. Similar to Exam 9, Exams 7 and 8 will also release sample IQs at the appropriate time.

Just to confirm, does this have anything to do with integrals or integration?

Thankfully, no.

How else should candidates prepare for IQs?

We understand that candidates will have to adjust somewhat in getting used to this new type of question and that the point values might be daunting. For example, candidates will need to consider the time spent on IQs vs. other exam questions, which will be different than in the past. However, we do not expect these questions to necessarily be more difficult for prepared candidates. In fact, we believe IQs will benefit candidates by reducing the complexity of the exams overall, as the number of distinct scenarios, assumptions and datasets that candidates face will be reduced.

Part of the mission of the Candidate Liaison Committee is to foster two-way communication between candidates and the CAS leadership. If you have any question about IQs, or any concerns that you would like to share with the Exam and Syllabus Committee, please send us a note by visiting http://www.casact.org/newsletter/index.cfm?fa=feedback and we will do our best to address it. ff

CAS Releases a New Interactive Online Course

Course 2 in the Statistics for Reserve Variability Series Now Available – "Introduction to Modeling Statistics"

Register for the Two-Course Bundle and Save

bit.ly/reservevariability

Visit the *Future Fellows* Blog

Come check out our new *Future Fellows* blog, accessible through the new *Future Fellows* portal at http://www.casact.org/future-fellows. You can get the latest news, read interviews with actuaries on a variety of topics, and learn tips and tricks to succeed in the workplace. It's a great way to interact with other actuaries, including CAS leaders, by engaging in the online community.

What topics would you like the Future Fellows Blog to cover? Email your suggestions to slitrenta@casact.org.

CAS Seminars and Meetings

Ratemaking and Product Management (RPM) Seminar & Workshops
San Diego, CA
March 27-29, 2017

The CAS Institute Opens Registration for the Certified Specialist in Predictive Analytics (CSPA) Credential

By Mike Boa, CAS Chief Communications Officer

ARLINGTON, Va. — The CAS Institute (iCAS), a new subsidiary of the Casualty Actuarial Society that offers specialty credentials for quantitative professionals, has launched its first credential offering, the Certified Specialist in Predictive Analytics (CSPA).

CSPA credential requirements are described on the new website at TheCASInstitute.org. Registration for the first requirement, "Property-Casualty Insurance Fundamentals," is now open. This course is administered by our strategic partner, The Institutes, and covers the core principles underlying property and casualty (P&C) insurance and risk management.

Availability of registration for the remaining CSPA requirements in 2017 are indicated in the table below.

Waivers for the first course and exam requirement and for the ethics course are available for eligible CAS Fellows and Associates and others meeting prescribed requirements.

After you ultimately earn your actuarial credentials and become CAS members, adding credentials from The CAS Institute sends a powerful message about your expertise in and commitment to the industry, which can further distinguish you in an increasingly competitive field.

See The CAS Institute website for more details on the new CSPA credential requirements.

CSPA Credential Requirement	Availability
1. P&C Insurance Fundamentals (required course and exam)	Online Course now open Exam offered starting January 2017
2. Data Concepts, Tools & Analysis – with P&C Applications (optional course and required exam)	Online Course opens January 2017 Exam offered starting April 2017
3. Predictive Modeling – Methods and Techniques (required exam)	Study Materials available April 2017 Exam offered starting July 2017
4. Case Study Project: P&C Predictive Modeling Application (completion of a required project)	Project assignments available starting July 2017
5. Online Course on Ethics and Professionalism (required course; choose among two offered courses)	Now available on-demand through The Institutes

The CLC is pleased to welcome the following new members: Lucia Batista, Michael Henk, Charles Lei, Nicholas Schneider, and Adam Vachon.

In addition, we are excited to have three new candidate representatives joining us: Celeste Bremen, John Klodnicki and Justin Young.

We would like to thank the following members who are rotating off of the committee this year: Kuda Chibanda, James Englezos, Heidi Givens, Winnie Li, Kristen Schuck, Elizabeth Storm, and David Zornek. Your contributions to the CLC have been invaluable, and we wish you the best of luck in your future endeavors.

Whether you are a candidate taking preliminary exams or a seasoned Fellow, we would love to have you join the CLC. Look out for the participation survey next summer and let us know if you are interested.

Straight from the Source: Advice from Graders on Upper-Level Exams

By Winnie Li, FCAS, Candidate Liaison Committee

Candidates typically spend 300-400 hours studying for each upper-level exam (5-9). It can be disheartening to know that, despite all of the hours spent on studying, candidates end up a few points away from passing. (While the CAS is increasing its transparency of the exam process, the actual grading process is still a bit murky.) I have interviewed a few graders about their grading experience, including any advice they have for candidates. I hope this article will help candidates better understand the grading process from a grader's perspective.

Exam graders usually receive responses for their assigned question two to three weeks after the exam is administered, and they grade all of the candidate responses within a three-week timespan. Each candidate response is reviewed by at least two graders, with most questions assigned a team of two, and larger teams for some lengthy questions with multiple parts. While each question has a suggested rubric, graders may modify the rubric as deemed appropriate as they grade papers. For example, each examiner may grade 20-50 papers before deciding that other responses not included in the rubric are appropriate and should be awarded credit. They would then re-grade all of the responses with the revised rubric in mind.

While graders try their best to give each candidate the benefit of a doubt, they have a few recommendations and suggestions for candidates based on common mistakes they've seen during grading.

Grading partners are in constant communication with each other regarding any discrepancies and "gray areas" of the question. When all of the responses are graded, the grading partners go through the results for each candidate, making sure that they agree on the score, discuss any differences and decide on the final mark. It is not unusual for questions to be analyzed and discussed several times before determining the final score for a particular response. The teams then submit grades for each candidate for the assigned question as well as the final rubric and examiners report, which includes sample correct answers and common mistakes.

Exam grading is a very serious duty, with each grader volunteering many hours of their personal time to the process. While graders try their best to give each candidate the benefit of a doubt, they have a few recommendations and suggestions for candidates based on common mistakes they've seen during grading.

While I was taking the exams, my biggest fear was that the examiners could not read my handwriting. I usually start my exam writing in perfect print, which quickly deteriorates into chicken scratch after an hour. But fear not, examiners often try their best to interpret each letter of a word if sentences are not legible. That does not mean that they can read your minds, and whenever possible it's always good to try to write as clearly as possible, but sloppy penmanship is unlikely to be the difference between a pass and a fail. Similarly, graders will do their best to ignore portions of the response that the candidate intended to erase, but this is sometimes difficult due to light erasing. If a candidate wants to retract something that has been written, it's best to either completely erase it or cross it out, so that there is no ambiguity for the graders.

Labels, labels, labels…Grading exams can be a messy process so the use of labeling is very important. The rule of thumb is, when in doubt, label it. You may have to create a chart or graph for a question. Graders may deduct points for not labelling chart/graph title, axes, or important points on the graph. In addition, the general shape and trend of the chart/graph should be clear even though the chart is not to scale. While the examiners often go out of their way to figure out the order of the responses as it pertain to the question when steps and pages are not labeled, it is to the candidates' benefit to number their steps or draw arrows when their calculations are all over the place. Graders also recommend that candidates define generic variables in calculations. For example, if you're using an equation where $x = y + z$, define all variables so partial credit may be awarded if there is a calculation error.

Candidates often ask "what abbreviations are appropriate for the exam?" Surely, given the time constraint, candidates are not expected to spell out everything. Graders recommend the following "rules" for abbreviations that candidates could apply when writing exams:

1. Any abbreviations that appear in the reading materials are appropriate.
2. Any abbreviations that appear in the question are appropriate.
3. Any key words that appear in the question are appropriate. For example, if the question asks "compare and constrast the Bornheuter-Ferguson and Cape Code method and calculate the ultimate loss ratios for each year using each method," then candidates can use the abbrievations BF and CC method in the response and the calculations. Use discretion when abbrieviating.
4. If unsure, define the abbreviation in the response only once and you may use the abbreviation for the entire response.

Candidates often make silly mistakes that result in the deduction of points. One of the most common errors is providing an answer in a different measurement than what was asked (loss ratio vs. loss amount). Candidates sometimes write down too many items for questions that ask for a specific number of items. This wastes valuable time — if a question asks for three items, only the first three items will be considered, regardless of how many are listed. On the other hand, candidates sometimes write down too few items.

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How to Handle Corporate Re-Orgs

By Elizabeth End, FCAS, Candidate Liaison Committee

Reorganizations may not seem like a big deal at the start of your career, but as you become more deeply involved in your work and your company, re-organizations take on more significance and are more impactful. They can reveal unforeseen opportunities at the same time as they threaten your job security. Unless you are a key decision maker who has initiated the re-org, it can be quite a stressful event where you feel in the dark and that the next step in your career is out of your hands. Even though the organizational structure as you know it is crumbling around you, there are several things to keep in mind to help you manage the uncertain time between the initial re-org announcement and its conclusion.

First, pay attention to all communications regarding the re-org. This may seem like an obvious piece of advice, but it is important. The communications should set the tone of the re-org and hopefully will provide you with a foundational understanding of the rationale behind the re-org. Additionally, if there are actions that must be taken by a specific date, such as letting your manager know if you have a preference for one team or another, you need to be aware of them and perform them within the required timeframe.

Although your manager or senior leadership might not be in a place to answer them, do ask questions that are on your mind as the re-org proceeds. You will be helping leadership understand your concerns and where previous communications might have been unclear. In addition, you will gain a better understanding of the re-org processes, actions and next steps. If you can indicate a preference or apply for a new role as part of the re-org, consider asking your manager for his perspective on the pros and cons of the various options. Your manager should know your specific skill sets and your desired development opportunities, so he can help you find a good fit among the choices.

Besides talking to your manager, also reach out to your mentor if you have one. A mentor will likely have experienced a similar situation at some point in her career, and she may have some words of advice or encouragement to share with you. A discussion around a past re-org may shed some light on what to expect for this one.

If you use a recruiter to keep you informed of possible job opportunities, you may want to call him and learn about open positions at other companies. There is the possibility that you might end up unhappy with your job assignment or without a position at the conclusion of the re-org, and so you might want or need to start exploring opportunities elsewhere. Talking to your recruiter can help you understand what options are available and get an early start on securing a job elsewhere.

Even if you have no intention of leaving your company, a re-org is a great time to update your resume. Your responsibilities might change at the re-org's conclusion, so now is the time to document what you have been working on to date. Often times during a re-org, work responsibilities may slow down a bit or be put on hold while management figures out the new go-forward plan. If that is the case, you should be able to find time to polish up your resume. If not, make time outside of work to refresh it. And if you do want to explore new internal opportunities in the company, an updated resume is a great starting point for discussion with potential managers.

Although re-orgs cause a lot of changes, the desire for actuarial students to pass exams stays constant. In the midst of a re-org, the uncertainty of the situation can be distracting, but you should do your best to not let it interrupt your study routine. Organizational structures will come and go, and you do not want them to push back your designation timeline. Staying focused on your exams will benefit you in the long run. It will also look good on your resume if you decide to seek greener pastures after the re-org.

A re-org can certainly be a stressful time, but a re-org is not a reason to act unprofessionally. Re-orgs result in a lot of speculation, and it may seem like the re-org is the only thing affected employees can talk about. It can be very tempting to spend a lot of time gossiping and passing on rumors that you were told or overheard over a cubicle wall, but the new structure will be revealed in due time. Rather than whispering or instant messaging what you have heard, you can use this opportunity to show your manager that you can be counted on to diligently continue your work and behave in a responsible manner. If you are given information about the re-org (for instance, you learn your new position before it is announced to the larger group) and are asked not to share that information with others, don't share it. This is a chance to show management that you are trustworthy, and that you will not hinder their communication plan. It also will prevent additional rumors and more unproductive time.

Along with acting professionally, also be considerate of those around you. Many re-orgs result in some employee displacement, and an employee who has been let go most likely doesn't want to hear another employee complaining about the new role she received.

Lastly, although it is easier said than done, be open to change. Hopefully management has very solid reasons for initiating the re-org, and you should try to acknowledge and accept the good that will come out of it instead of solely focusing on the negatives. The new structure and how you fit in it will seem a bit foreign at first, but it will slowly become your everyday normal. Given more time, another re-org may come about, and you might even be sad to see this structure go.

Straight from the Source

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Another major pain point for graders is that candidates sometimes show all the correct calculations, but the answer is conflicting. While it is evident that candidates know the material, there may be a written error that shows a conflict between the final answer and the calculations shown. For example, candidates often forget the word "not" in their final answer, negating the correct response. In this case, graders may offer partial credit despite the incorrect response. Graders advise candidates to re-read the question and the final response to make sure that it appropriately answers the question. It is understandable that candidates may not have time to do so, but it is highly encouraged where possible.

While it is always advantageous to show all work, graders do not expect candidates to write out everything in detail given the time constraints. For calculation responses, at a minimum, show the formula and one calculation with all of the numbers written out. Candidates can then just write the answer for the rest of the calculations. For written responses, full sentences are often unnecessary. Candidates may use bullet points as long as they reflect ideas in a clear and concise manner. Oftentimes, candidates include irrelevant information in their response. Though superfluous information may not result in a deduction of points, it does waste valuable time.

Personally, one of my biggest issues while taking the exams was crossing out paragraphs and then deciding that was my final response. Graders DO NOT recommend that candidates re-write the entire paragraph. While the exam instructions specifically address that crossed out words and paragraphs will not be graded, if you comment on the side that "this is the final answer" graders will consider the paragraph as long as it's legible. Hint: when crossing out items, do so lightly, just in case you change your mind.

Resources & Reminders

Use the CAS website for the following resource tools:

- CAS *Syllabus of Basic Education* and updates
- "Verify Candidate Exam Status" to confirm that joint exams and VEE credits are properly recorded
- "Looking at the Exam Process" series
- Feedback button to the Candidate Liaison Committee
- Feedback button to the Examination Committee
- CAS Regional Affiliates news

Candidate Liaison Committee Mission

The Candidate Liaison Committee communicates with CAS candidates, collectively and individually, who are taking CAS examinations. The committee informs candidates as to appropriate courses of action available to them. Through periodic communication, this committee informs candidates of results of examination administrations, actions taken on complaints received regarding examination questions and reasons for syllabus and examination changes being implemented. Communication encompasses existing policies and procedures as well as changes being considered. The committee should advise the CAS and its committees of the interests of the candidates regarding matters that come before the CAS and its committees. Candidates may contact the Candidate Liaison Committee at the CAS office address. The Casualty Actuarial Society is not responsible for statements or opinions expressed in the articles, discussions or letters printed in *Future Fellows*.

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Vendor Links

EMAIL STUDY GROUPS

Email study groups are available for candidates preparing for CAS examinations. Information about each study group list is available on each exams syllabi landing page.

STUDY AIDS AND SEMINARS

Information on study aids and seminars is provided only as a convenience to CAS candidates. The CAS takes no responsibility for the accuracy or quality of the study aids and seminar announcements attached to this notice.

Please note that the Examination Committee expects candidates to read the material cited in the *Syllabus* and to use other material as a complement to the primary sources rather than a substitution for them. ff

Actex Learning/Mad River Books Exams 1, 2, 3F, S, 4, 5, 6, 7, 8, and 9	Coaching Actuaries Exams 1, 2, 3F, 4, 5, S, and VEE
The Actuarial Bookstore Exams 1, 2, 3F, S 4, 5, 6, 7, 8, 9, ST9, and VEE	The Infinite Actuary Exams 1, 2, 3F, S, 4, 5, 6, 7, 8, and 9
ALL 10, Inc Exams 5, 6, 7, 8, 9	New England Actuarial Seminars VEE