

B. The Examination

Introduction

The examinations for admission to the Casualty Actuarial Society are designed to establish the qualifications of candidates. The Examination Committee creates exams that follow guidelines developed by the Syllabus Committee. Complete coverage of all readings listed in the *Syllabus* is not practical for every exam every year. The goal is to produce exams that contain representative, high-quality questions that test candidates' knowledge of topics that are presented in the learning objectives. Thus, the candidate should expect that each exam will cover a large proportion of the learning objectives and associated knowledge statements and syllabus readings, and that all of these will be tested at least once over the course of a few years.

The exam questions will be based on the published learning objectives and supporting knowledge statements. It is intended that the readings, in conjunction with the material on the lower numbered examinations, will provide sufficient resources to allow the candidate to perform the learning objectives. The exams will test not only candidates' knowledge of the subject matter, but also candidates' ability to apply that knowledge.

Order of Examinations and VEE Topics

In the development of the syllabus readings and examination questions, it is assumed that candidates are familiar with material covered on earlier examinations. Therefore, it may be beneficial for candidates to take examinations in numerical order. There are, however, circumstances when another order might be more appropriate. For example, a candidate may wish to study an exam that is closely related to his or her current work.

VEE topics are not prerequisites to taking actuarial exams and may be fulfilled independently of the exam process (i.e., prior to or concurrent with taking actuarial exams). The following insights on VEE topics, however, may be helpful. VEE-Applied Statistical Methods will help strengthen candidates' statistical skills and completing it prior to taking Exams 3 and 4 will make these exams easier to understand. VEE-Economics and VEE-Corporate Finance will help strengthen candidates' understanding of managerial decision making and completing these topics prior to taking Exam 8 will make this exam easier to understand.

To help candidates decide which exam to take, the following chart indicates which exams assume knowledge of material found on prior exams. Most candidates will find it easiest to study for an exam after studying for all of the exams listed in the "prior knowledge" column.

Exam or VEE Topic	Assumes Prior Knowledge from the Following Exam(s)
VEE-Applied Statistical Methods	None
VEE-Corporate Finance	None
VEE-Economics	None
Exam 1/P	None
Exam 2/FM	None
Exam 3F/MFE	Exams 1/P and 2/FM
Exam 3L	Exam 1/P
Exam 4/C	Exam 1/P
Exam 5	Exams 1/P and 2/FM
Exam 6	Exams 1/P and 2/FM
Exam 7	Exams 2/FM, 5, and 6
Exam 8	Exams 1/P, 2/FM, 3, 4/C, 5, and 6
Exam 9	Exams 1/P, 2/FM, 3, 4/C, and 5

Notes on Order of Examinations

- Exams 3F/MFE, 3L, 4/C, and 9 make extensive use of Exam 1/P material. Exams 5, 6, and 8 assume an understanding of Exam 1/P material.
- Both Exams 5 and 6 are approachable without detailed knowledge of the material on Exam 2/FM. A candidate who has studied this material, however, may gain a deeper understanding of the material on Exams 5 and 6 and its foundations.
- Many candidates find it easier to study for the more mathematical Exams 1-4 when they are not too far removed from college math.
- Exam 4/C covers the theory of credibility. Credibility theory is applied in Exams 5 and 6. Candidates who have mastered credibility theory in Exam 4/C may find its application more intuitive on Exams 5 and 6. On the other hand, candidates who have experience applying credibility on Exam 5 (or to a lesser extent Exam 6) may find the theory on Exam 4/C easier to understand.
- There is a great deal of thematic overlap among Exams 7, 8, and 9. Candidates may find their understanding of whichever one they study last enhanced by the material learned on the other two.

Requirements for Admission to Examination Center

To be admitted into an examination center, each candidate must present a positive identification with a signature and a photograph (e.g., driver's license, passport, school or work ID, etc.). If a photo ID is not available, the candidate must present *two* forms of identification with a signature, with at least one form containing a physical description (height, weight, hair color, eye color, etc.). Each candidate will be required to sign in at the examination center. A candidate who does not present positive identification or who refuses or is unable to provide a matching signature will not be permitted to write the examination. For examinations offered by computer-based testing, each candidate must present a valid government-issued photo identification with the candidate's signature (details are available under "Computer-Based Testing Rules and Procedures"). For the paper-and-pencil administrations of Exams 1/P, 2/FM, 3F/MFE, and 4/C, candidates also must present a valid letter of admission that will be sent by Preliminary Actuarial Examinations/SOA.

Candidates should arrive at the examination center at least 30 minutes before the scheduled exam time. Candidates may not leave until two hours after the start of the examination. For Exams 3L and 5-9, candidates may not leave during the last 15 minutes of the examination.

Conduct of Examinations

The examinations are recorded exclusively in writing (except for exams that are administered by computer-based testing). Except as is noted in the following paragraphs, no books, papers, typewriters, slide rules, or electronic or mechanical aids for computation of any kind may be brought into the examination room by candidates, nor may any candidate communicate with, or obtain any assistance from, any other candidate during the examination. Candidates must respond to essay questions in English unless advance notice is given (see "Languages Other than English" under "Examination Rules—Registration" above). Examination answer sheets are not returned to candidates.

For Exams 3L and 5-9, a candidate wishing to obtain his or her own examination booklet and scrap paper subsequent to the examination must bring a self-addressed stamped envelope to the examination center. The recommended minimum postage is \$2.87 for domestic mail in the U.S. For Exams 3L and 5-9, approximately one week after all exams have been completed, the exam and a *preliminary* list of multiple-choice answers will be posted in the "Admissions/Exams" section of the CAS Web Site. Sample solutions for essay questions will not be available until they are published on the CAS Web Site on July 30, 2010, for May Examinations and January 31, 2011, for October Examinations.

Calculators

Electronic calculators will be allowed in the examination room for all examinations. Only the calculators listed below may be brought into the examination room. Books, papers, computers, or other electronic devices may not be brought into the examination room. Candidates may use the battery- or solar-powered models of the following Texas Instruments calculators:

- BA-35
- BA II Plus
- BA II Plus Professional
- TI-30Xa
- TI-30X II (IIS solar or IIB battery)
- TI-30XS MultiView (or XB battery)

Candidates may use more than one of the approved calculators during the examination. **For those using the BA II Plus, BA II Plus Professional, TI-30X II (IIS solar or IIB battery) or TI-30XS MultiView (or XB battery) models, candidates will be required to show examination proctors that the memory has been cleared prior to the start of the examination. For the BA II Plus and BA II Plus Professional, clearing will reset the calculator to the factory default settings.**

Calculator instructions cannot be brought into the examination room. During the examination, the calculator must be removed from its carrying case so the proctor can confirm it is an approved model. **Any unauthorized calculator brought to the examination center will be confiscated for the duration of the examination. Candidates using a calculator other than the approved models will be subject to examination disqualification and other disciplinary action.**

Candidates may purchase calculators from stores or directly from Texas Instruments: telephone: (800) 842-2737; Web site: www.ti.com.

It is the candidate's responsibility to see that the calculator used during the examination is in good working order. For CAS Exams 3L and 5-9, supervisors will have a spare approved calculator available for a candidate whose calculator malfunctions. It is not to be distributed to a candidate without a calculator or whose unauthorized calculator has been confiscated.

Examination Discipline

Candidates must not give or receive assistance of any kind during the examination. Any cheating, attempt to cheat, assisting others to cheat, participating therein, or engaging in such improper conduct as listed below is a serious violation and will result in the CAS disqualifying the candidate's paper and other disciplinary action as may be deemed appropriate. Candidates have agreed in their applications for examination to be bound by the rules and regulations governing the examinations.

Examples of improper conduct include but are not limited to:

1. Gaining access to examination questions before the examination or aiding someone else to do so.
2. Using an unauthorized calculator (as defined in the *Syllabus*) or other mechanical aid that is not permitted.
3. Looking in the examination book before the instruction to begin is given.
4. Marking or otherwise writing on the examination book or answer sheet before the instruction to begin is given.
5. Making any changes, additions, deletions, or otherwise marking, erasing, or writing on the examination book or answer sheet after the time for the examination has expired.
6. Having access to or consulting notes or books during the examination.
7. Looking at or copying from another candidate's paper.
8. Enabling another candidate to copy from one's paper.
9. Talking or otherwise communicating with another candidate during the examination.
10. Disturbing other candidates during the examination.

11. Consulting other persons outside the examination room during the examination.
12. Copying questions, answers, or answer choices to take from the examination room.
13. Taking an examination book from the examination room.
14. Taking an examination for another candidate.
15. Arranging to have another person take an examination for the candidate.
16. Threatening or physically or verbally abusing a supervisor or proctor responsible for curbing or reporting improper conduct.
17. Disclosing the contents of an examination to any other person prior to the examination's release. (For CAS Exams 3L and 5-9, this would generally apply to the day when the examination is administered.)
18. Presenting false information on an examination application.
19. Failing to remain in the examination room for a minimum of two hours during the examination [for examinations with this requirement].
20. Failing to follow other examination instructions.
21. Accessing or using a communication device (PDA, cell phone, etc.) during the exam or while at the exam site.

The CAS Examination Committee, or its designee, will investigate any irregularity or suspected violation of the rules involving the examination process, and a determination will be made regarding the matter. Where there is a determination to invoke a penalty, the candidate is advised by letter. In the case of a candidate who is a member of the CAS, the candidate's conduct will be reported to the Actuarial Board for Counseling and Discipline (ABCD) or to the Canadian Institute of Actuaries (CIA) if the final penalty invoked is more than disqualification of the examination.

Candidates for the CAS Examinations are expected to follow the rules and procedures included in this *Syllabus*, the *Notice of Examinations*, and the "Instructions to Candidates" printed on their examination booklets as well as announcements made by the supervisors at the examination locations. All candidates, on their applications for examinations, are required to read and sign the following statement: "I have read the rules and regulations concerning the examination(s) for which I am applying and agree to be bound by them. I also agree that the results of any examination(s) which I take, and any action taken as a result of my conduct may, at the sole discretion of the Casualty Actuarial Society [and/or the Society of Actuaries for jointly administered exams], be disclosed to any other bona fide actuarial organization that has a legitimate interest in such results and/or actions."

The CAS may, at its sole discretion, disclose to any other bona fide actuarial organization having a legitimate interest, information on the identity of candidates determined to have committed a serious examination violation (those for which the penalty is greater than the simple disqualification/nullification of the examination), and the specific penalties imposed on those candidates.

If an actuarial organization with which the CAS has a working relationship (such as the Society of Actuaries) invokes a penalty against a candidate for improper conduct during an examination for which the CAS is not a joint sponsor, the CAS will invoke the same penalty for all CAS-sponsored examinations. If the CAS takes any disciplinary action, it will notify the other actuarial organizations of that action.

These standards may seem stricter than those which candidates are accustomed to in other examination environments. The CAS maintains these strict standards because the examinations are such a significant part of a candidate's career. Therefore, the equitable administration of the examinations and enforcement of the highest standards of conduct cannot be emphasized too strongly.

Candidates may obtain a copy of the full CAS Policy on Examination Discipline by sending a written request to the CAS Office.

Computer-Based Testing

The Policy on Examination Discipline is the same for those taking exams by computer-based testing or in the traditional paper-and-pencil format. There are some unique rules for the CBT administration that are available on the “Computer-Based Testing Rules and Procedures” Web page. If there is a discrepancy between specific rules for the traditional paper-and-pencil exam administration and computer-based testing, the computer-based testing rules will govern.

Multiple-Choice Questions

Exams 1-4 consist entirely of multiple-choice questions; other CAS examinations may have a section of multiple-choice questions. Each multiple-choice problem includes five answer choices identified by the letters A, B, C, D, and E, only one of which is correct. For examinations administered by computer-based testing, candidates should click on the appropriate answer. For all other exams, a separate answer sheet provides a row of five ovals for each problem, identified with the letters A, B, C, D, and E, corresponding to the five answer choices. After deciding which answer is correct, candidates should blacken the oval that has the same letter as the appropriate answer. Since the answer sheets are scored by optical scanning equipment, a Number 2 pencil must be used to blacken the ovals. It is important that only one oval be blackened for each question.

Guessing Adjustment

For Exams 1/P, 2/FM, 3F/MFE, and 4/C no guessing adjustment is made to candidates’ scores. Therefore, candidates will maximize their scores on these examinations by answering every question. On Exams 3L and 5-9, multiple-choice questions are scored in such a way that there is no advantage or disadvantage to be anticipated from guessing answers in a purely random fashion as compared with omitting the answers entirely. No additional points will be given for multiple-choice questions left blank, but one-quarter of the point value for each question will be deducted for each incorrect answer.

Lost Examinations

The CAS is not responsible for lost or destroyed examinations. In the case where an examination is lost or destroyed, the examination fee will be refunded. The CAS and other organizations that jointly administer and/or jointly sponsor CAS Examinations will assume no other obligation and candidates must take the examinations with this knowledge. The only exception to this policy is for the paper-and-pencil version of multiple-choice Exams 1/P, 2/FM, 3F/MFE, and 4/C. Whenever reasonably possible, Preliminary Actuarial Examinations/SOA will make use of a candidate’s examination book to reconstruct the answers selected by the candidate. Therefore, candidates may wish to circle or otherwise clearly indicate their answer choices in the examination books. However, additional time in the examination period will not be given for candidates to do this. If a candidate receives a passing grade as a result of the review of the examination book, the examination fee will not be refunded.