

Casualty Actuarial Society

Pass Mark for CAS Exam 9

The primary objective of setting the pass mark is to pass candidates who demonstrate a mastery of the material at roughly consistent levels with each exam administration. This is more difficult than it appears, because the actual results for each administration are a function of both the preparedness of the candidates and the difficulty of the exam. Since members of the CAS Examination Committee and their experience levels change over time, this can (and does) result in changes in the difficulty of the exam at each administration.

The Examination Committee uses a series of benchmarks to gauge the candidates' overall knowledge of the material. First, a panel of experienced committee members evaluates the exam and determines a score to be achieved by a minimally qualified candidate. This process sets a baseline for determining the final pass mark. After the initial grading takes place, the results for each individual question are analyzed for how well they distinguished between those who demonstrated that they "knew the material well" and those who did not. In addition, the distribution of total scores is analyzed and compared to past exam distributions. This information helps the Committee determine whether changes in candidate performance are driven by differences in the difficulty of the exam or by a better or more poorly prepared group of candidates.

The Examination Committee reviews the statistics on each question as well as comments received from candidates to determine whether any of the questions were flawed. Once the Examination Committee identifies a flawed question, the committee decides if the question should be dropped from the exam or the question should be graded with multiple answers. If the question is dropped from the exam, then the exam is graded with less than the original number of points.

Many people are involved in the deliberations of the pass mark. After the grading session, the Examination Committee part chair submits a report to the general officer of the exam series and the Examination Committee chair. The report includes the pass mark recommended by the part committee, a detailed analysis of the exam, and a description of any unusual questions or situations that required special handling. The general officer and chair discuss the recommendation with the vice president-admissions to finalize the pass mark. More detail about the exam and grading process can be found in the section "Looking at the CAS Examination Process" in the Admissions/Exams – Exam Information section of the CAS web site.

The CAS releases the pass score information for Exams 5-9 after the appeal deadline for the exam session has passed. The purpose of releasing the pass scores is to help candidates prepare for future exam sittings. The 75th and 95th percentile scores are also released for each exam. These two key statistics indicate the performance level achieved by the better prepared candidates on the exam.

Selecting the exact point that determines the passing candidates is a difficult decision that the Examination Committee does not take lightly. Unfortunately, one question can mean the difference between passing and failing. Thus, candidates are encouraged to aim for higher performance levels than the level needed to barely pass prior examinations.

Pass marks for related exams of previous years are included to provide candidates with a context for the most recent pass mark.

CAS Exam 9

<u>Exam 9</u>	<u>Total Points</u>	<u>Pass Mark</u>	<u>95th Percentile</u>	<u>75th Percentile</u>	<u>Comments</u>
Fall 2010	84.5	61.50	70.00	63.75	Question 2, parts a and b were invalid.
Fall 2009	95.5	72.75	83.50	76.75	Question 2 was invalid.
Fall 2008	100	66.00	77.38	68.00	
Fall 2007	100	70.00	84.00	77.38	
Fall 2006	100	68.00	79.00	70.88	
Fall 2005	100	67.75	84.25	73.50	
Fall 2004	100	65.75	81.00	71.50	
Fall 2003	99	59.50	72.75	61.75	Question 14 was invalid. Question 19 answers A and D were accepted.
Fall 2002	100	63.50	77.38	68.50	Question 11: answers D and E were accepted.
Fall 2001	100	54.75	67.13	58.50	Question 7: answers C and D were accepted. Question 15: answers A and D were accepted.
Fall 2000	100	53.25	68.54	58.25	Question 20: answers B and D were accepted.
Fall 1999	100	52.00	65.60	56.70	Question 6: answers D and E were accepted. Question 19: answers B and D were accepted.
Fall 1998	100	51.75	66.30	56.60	
Fall 1997	99	57.50	68.60	62.30	Question 8 was invalid. Question 10: answers A and D were accepted.
Fall 1996	97	54.50	68.40	60.30	Questions 2 and 40 were invalid. Question 5: answers A and D were accepted. Question 8: answers B and D were accepted. Question 12: answers B and D were accepted.
Fall 1995	98	58.00	72.90	62.80	Question 52 was invalid.

