

Casualty Actuarial Society

Pass Mark for CAS Exam MAS-I

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 Syllabus & 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 Syllabus & Examination Committee uses a series of benchmarks to inform the selection of the final pass mark. 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 the degree to which 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 Syllabus & 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 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 total point value.

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 “Examination Rules – Grades and Accreditation” section of the Syllabus of Basic Education section of the CAS web site.

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 Syllabus & 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 MAS-I Modern Actuarial Statistics

<u>Exam S</u>	<u>Total Points</u>	<u>Pass Mark</u>	<u>95th Percentile</u>	<u>75th Percentile</u>	<u>Comments</u>
Fall 2019	90	50.50	69.50	57.00	Qu. 35 both B & E accepted Qu. 38 both B & D accepted
Spring 2019	90	51.50	66.00	54.00	Qu. 28 both B & E accepted
Fall 2018	90	53.00	70.00	55.00	
Spring 2018	90	53.00	72.00	60.00	