

CAA GLOBAL

EXAMINERS' REPORT

October 2022

CAA Module 5 Models and Audit Trails

Introduction

The attached report has been written by the Principal Examiner with the aim of helping candidates, both those who are sitting the examination for the first time and using past papers as a revision aid and also those who have yet to pass the subject.

The specimen solutions are based on one possible approach to modelling the scenario set but the examiners gave credit for any alternative approach which they considered to be reasonable.

Clifford Friend
Chair of the Board of Examiners

December 2022

General comments on Module 5

Module 5 aims to ensure that successful candidates can model data and develop an audit trail to document the work done.

Part I of this examination tests the ability to produce a complete and accurate model using sound and simple techniques, and the ability to perform reasonableness checks and automated checks throughout. Candidates are therefore expected to have a working knowledge of spreadsheets.

Part II of this examination tests the ability to produce an audit trail that documents all the work done, including the methods, the parameters, the data used, the checks performed and the results of those checks. This can be done in a separate sheet within the spreadsheet model or in a separate Word document.

It should be noted that there will generally be more marks available for Part II than for Part I to reflect the importance of good communication and documentation when producing models. Candidates should bear this in mind when considering how much time to allocate to each of these elements of the assessment.

General comments on Examination October 2022

This examination involved analyzing the structure of an airline's customer reward program. Candidates were provided with data representing the number of flights taken and distance flown for each flight for a sample of passengers. Candidates were required to check (but not amend) this data before using it alongside parameters provided for reward club membership levels to determine the proportion of passengers expected in each membership level at the end of the year. Candidates were asked to determine the expected proportion of passengers in each membership level using both the number of flights and total distance travelled. Candidates were required to summarize, on a suitable chart, the results of further calculations to determine the threshold number of flights would result in a desired proportion of passengers being in the top membership level using the data and parameters provided.

The model produced should be robust and adaptable with as much automation as possible such that, for example, if an alternative set of parameters were used, the changes would feed through without further intervention. Marks were not awarded for copying and pasting the data between worksheets. Candidates should have linked all future calculations to the raw data. The use of named data ranges can be helpful for understanding and adapting the model, particularly for key parameter values. Some candidates could have achieved higher marks if their audit trails had included more detail. When describing methodology, candidates should note that they need to state their methods and logic for each stage of the calculation clearly. This should be done in words rather than using formulae or Excel functions. Furthermore, a simple statement that a calculation has been done, with no explanation as to how, is not sufficient. The audit trail should provide sufficient detail to enable another analyst to understand each stage in the calculation. Candidates are strongly encouraged to look at the sample solutions provided to better understand the level of detail they should be aiming to produce in their audit trails.

END OF EXAMINERS' REPORT