## CAA GLOBAL

# **EXAMINERS' REPORT**

### October 2023

## 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 2023

#### **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 is allocated to each of these elements of the assessment.

#### **General comments on Examination October 2023**

This examination involved analyzing insect mortality. Candidates were provided with life tables representing mortality date for male and female insects aged 0 to 25 days old. Candidates were required to check (but not amend) this data before using it to determine expectations of life and expected population mix. In addition, candidates were asked to repeat their calculation under an alternative scenario, where insect mortality is adjusted using the mortality improvement parameters provided. Candidates were required to summarize, on suitable charts, the results of their analysis.

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 clearly state the methods and logic for each stage of the calculation. 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. Note the sample model and audit trail present one possible approach. Alternative approaches which produced the required analysis would receive equal credit.

### END OF EXAMINERS' REPORT