

# GUIDE TO SETTING UP ONLINE TESTS

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## INTRODUCTION

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An online test should be set up appropriately to ensure the method used is robust, which means it will be closely aligned with its course, with the minimal risk of abuse by those taking it.

Online tests can be moderated/invigilated or taken independently. The former will inherently involve a high level of control, while the latter will need specific mechanisms in place to ensure a high level of probity. This document primarily relates to independent tests.

## WRITING THE TEST QUESTIONS

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- Note that a typical 1a test should have 15 to 25 questions and a typical 1b/c test would have 30 to 50 questions
- A variety of question types can be used, with multiple choice/selection being the most common. The number of answer options should be at least four when multiple choice/selection is used. See the **LCS Guide to Writing Multiple Choice Tests**.
- The LCS has some sample test questions for each LCS Level that can be used or adapted.
- Questions need to relate to the learning outcomes of the course to which they are linked and the final set of question should cover the learning outcomes proportionally. A simple table with the learning outcomes in column one and the test questions that relate to each in column two can be used to confirm appropriate coverage. This will also highlight test questions that are not related and so candidates for removal.

## SETTING TEST PARAMETERS

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The range of test parameters available will depend on the system being used and the following represents what is currently typical. You should ensure that the system you select has the majority of these.

In setting up a test, the following needs to be considered:

- **Test window length:** When a test is taken after a course independently, a period of time is agreed for it to be taken (referred to as the 'test window'). This should generally be one to three weeks. The time between the end of the training and opening of the window needs to be balanced between a short time so that the material is fresh in learners' minds and a longer period to allow learners time to prepare.

## LCS Guidelines for Online Testing

- **Time allowance:** The guideline is to allow 30 seconds to one minute for a typical 'chose one out of four options' question, depending on difficulty. The test should automatically be submitted when the time allowance has been reached.
- **One sitting, or pause and resume;** the guideline is to ensure that the test has to be completed in one sitting.
- **Question ordering;** the guideline is for questions to appear in random order, one at a time.
- **Question banks:** some systems allow for a set number of questions to be selected from a question bank, so each candidate will potentially get a different set of questions. This adds greater robustness to the test.
- **Pass mark;** the guideline minimum is 66% for MCTs, where there is no negative marking used, though test setters may wish to increase this to a maximum of 80%
- **Marks per question;** equal marks can be assigned to all questions assuming they are of a similar standard or different marks can be assigned if there is a range of difficulty. Negative marking is an option, as is partial marking, when an answer given is partially correct. The general advice is to keep the marking scheme relatively simple, so learners do not get confused.
- **Permitted number of retakes;** the guideline is two attempts within a test window. A third attempt should only be permitted after some form of intervention, such as refresher training, one to one guidance, a revision programme, etc
- **Review capability and back-tracking;** the guideline is to permit learners to review the test before finally submitting.
- **Communication of test results;** learners should be informed directly of their result by the system. They should not be given a list of the questions and answers, though it is acceptable for incorrect questions only to be communicated.

## SETTING UP THE TEST

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- Learners should be provided with detailed instructions before taking the test, particularly in relation to the question parameters noted above.
- There should be a Declaration that they agree to before taking the test, for example:
  - *By accessing the test area and taking the test you agree to:*
    - *not seek any assistance from other persons in answering questions*
    - *undertake it on an individual basis*
    - *not take copies of questions or communicate them to any other party.*

## REVIEW

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Most systems will allow you to analyse the results thoroughly – eg average scores per person, the proportion of correct/incorrect answers per question, etc, which will allow you to review and adjust questions and the test parameters if necessary.