

COMPUTER-BASED EXAMS PUT TO THE TEST

RELEVANT TO CAT PAPERS 1 TO 4 AND ACCA QUALIFICATION PAPERS F1 TO F3

This article considers the benefits of computer-based exams (CBEs), highlights points that you need to be aware of when completing a CBE, and looks at the different types of questions featured in these exams.

ACCA introduced CBEs in 1998. Approximately 60,000 ACCA CBEs are taken each year by students in exam centres around the world. A list of the CBEs currently offered is shown in **Table 1**, and ACCA plans to increase the number of CBEs in the future.

TABLE 1: COMPUTER-BASED EXAMS OFFERED BY ACCA

CAT	ACCA Qualification
Paper 1 (UK and INT), <i>Recording Financial Transactions</i>	Paper F1, <i>Accountant in Business</i>
Paper 2, <i>Information for Management Control</i>	Paper F2, <i>Management Accounting</i>
Paper 3 (UK and INT), <i>Maintaining Financial Records</i>	Paper F3 (UK and INT), <i>Financial Accounting</i>
Paper 4, <i>Accounting for Costs</i>	MSER equivalents are available for Papers F2 and F3

A rigorous approach is taken when developing CBEs. Questions are written by experienced writers and are then thoroughly reviewed by both examiners and the Qualifications team at ACCA, before being entered into the CBE system. Questions are trialled in exam conditions to gather statistical data on how they work and, if necessary, questions are revised in light of this data. It is only when all these stages are completed that questions are ready to be included in actual exams.

COMPUTER-BASED VS PAPER-BASED EXAMS

CBEs offer benefits over paper-based exams, making CBEs ideally suited for certain types of exam. A particular benefit of the current CBEs is that they can be automatically marked by computer, which means that you can receive your results as soon as you complete the exam.

It is also possible to complete a CBE at any time of year rather than being restricted to the June or December exam sessions. Exams are automatically constructed from a large bank of questions, which means that a group of students taking the same exam in the same place and at the same time will be presented with different questions, in different orders. Questions are specifically written for the CBE question bank and cover all syllabus areas. There is no way of predicting which questions will be included in an exam, but the questions will be drawn from across the syllabus.

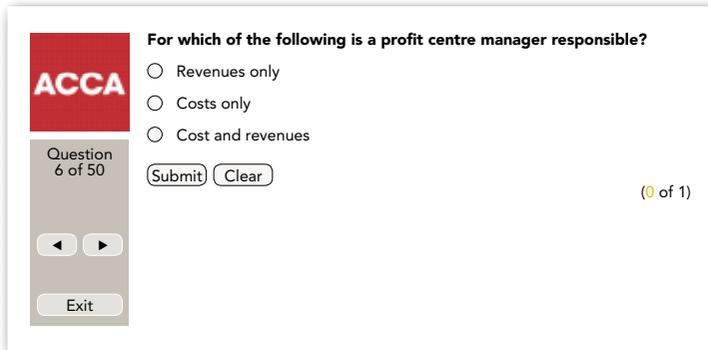
Equivalent exams are available in paper-based format. However, completing a CBE is a very different experience to completing an exam on paper. The types of questions included in each format will be similar, but the way that each question is presented, and the answer recorded, differs between the two. In a CBE, candidates record their answer on the same screen where the question is shown; for paper-based multiple-choice exams, answers are recorded on a separate *Candidate Registration Sheet* (CRS). Also, the whole experience of moving between questions and progressing through the exam is quite different. In a paper-based exam, you can see several questions at a time, whereas in a CBE, only one question at a time can be seen. Another difference is in the way we read information presented in different formats; because of our experience online, our eyes tend to jump around the computer screen rather than read it systematically as we would a printed page. For CBEs, therefore, remember to take time to read the question carefully to ensure that you don't miss any important information.

These differences mean that it is important for you to take time to familiarise yourself with the CBE system before taking a CBE for the first time. Go to www.accaglobal.com/students/study_exams/exams/cbe/demo to attempt demonstration CBEs on the ACCA website. By practising exam technique using these demonstrations, you can concentrate on answering the questions rather than understanding the system, when eventually taking a real CBE.

USING THE CBE SYSTEM

Actions associated with paper-based exams, such as turning a page, need to be recreated in different ways in a CBE. This is achieved by reserving the left-hand side of the screen for tools which enable movement between questions and which also help you monitor your progress through the exam, as can be seen in **Figure 1**, an example from the demo F2 CBE. The real exams include additional features, such as a clock to show how much time is remaining, and a drop-down list of questions showing the questions not yet answered.

FIGURE 1: SAMPLE SCREEN FROM THE F2 CBE



Once you have entered your answer for a question, it is important to click on the 'Submit' button for your answer to be saved. You can revisit questions and change answers by clicking on the 'Clear' button to remove your old answer; remember to click on 'Submit' to save your new answer once you have entered it.

Use the drop-down question list and the clock to monitor your progress through an exam. For example, if you are less than halfway through an exam with only one of the two hours remaining, then you are probably spending too much time on each question and should move through the remaining questions more quickly.

Do not spend a lot of time on questions that you are unsure of; instead, move on and come back to these questions at the end of the exam. Any questions that you could not answer first time through will be highlighted by an asterisk in the question list, and you can quickly move to these questions by clicking on the relevant question in the list. When you return to these more difficult questions, if you still cannot work out the answer, then guess the most likely option and submit this response. For number entry questions, where no answer options are given, enter a number that you believe could be correct. You will not lose any marks for an incorrect guess.

QUESTION TYPES

Currently, ACCA CBEs comprise four main question types: multiple-choice, multiple-response, multiple-response matching, and number entry. Within these question types there is a mix of questions worth one or two marks, depending on the amount of information to be processed. The number of marks available for each question is shown on the right-hand side of the question screen. **Table 2** shows the question types available in each CBE.

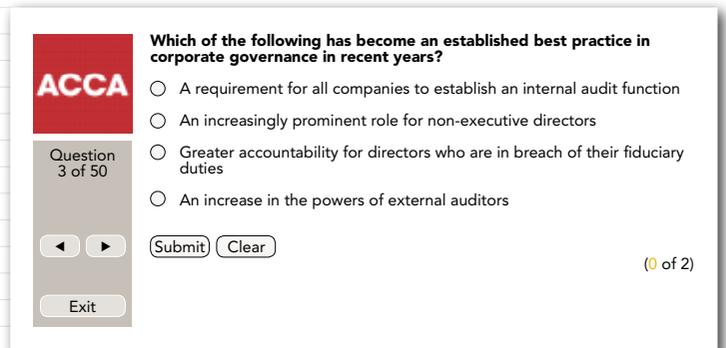
TABLE 2: COMPUTER-BASED EXAM QUESTION TYPES

Question type	CAT	CAT	ACCA
	Papers 1 and 2	Papers 3 and 4	Qualification Papers F1, F2 and F3
1 mark			
Multiple-choice			✓
Multiple-response			✓
2 marks			
Multiple-choice	✓	✓	✓
Multiple-response		✓	✓
Multiple-response matching		✓	✓
Number entry		✓	✓

Multiple-choice questions (MCQs)

MCQs are the most commonly used question type and feature in all ACCA CBEs. There are two types: questions with two or three answer options, which are worth one mark, and questions with four answer options, which are worth two marks. **Figure 2** shows an example of a two-mark MCQ taken from the demo F3 CBE.

FIGURE 2: TWO-MARK MULTIPLE-CHOICE QUESTION



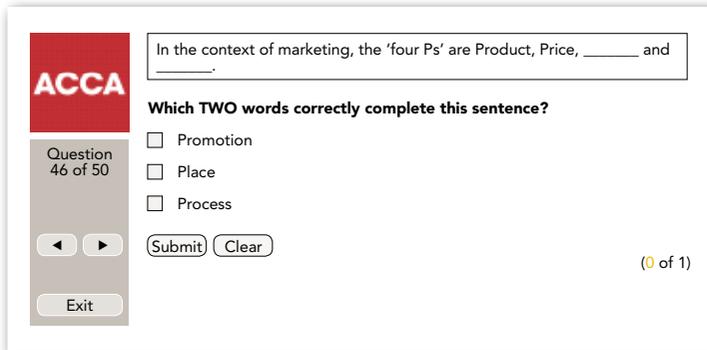
This question type comprises a question and several answer options, only one of which is correct. Some questions also include a question stem – additional information needed to help you work out the answer. This information is usually presented in a box at the top of the screen.

You answer the question by clicking in the 'radio' button next to your chosen answer option, and then clicking the 'Submit' button. The computer prevents you from selecting more than one answer option at a time. You must press the 'Submit' button if you change your answer, otherwise your previous answer will be the one saved at the end of the exam.

Multiple-response questions

There are two variations of this question type: questions with two out of three correct answer options, which are worth one mark, and questions with two out of four correct answer options, which are worth two marks. **Figure 3** shows an example of a one-mark multiple-response question taken from the demo F1 CBE.

FIGURE 3: ONE-MARK MULTIPLE-RESPONSE QUESTION



In the context of marketing, the 'four Ps' are Product, Price, _____ and _____.

Which TWO words correctly complete this sentence?

Promotion

Place

Process

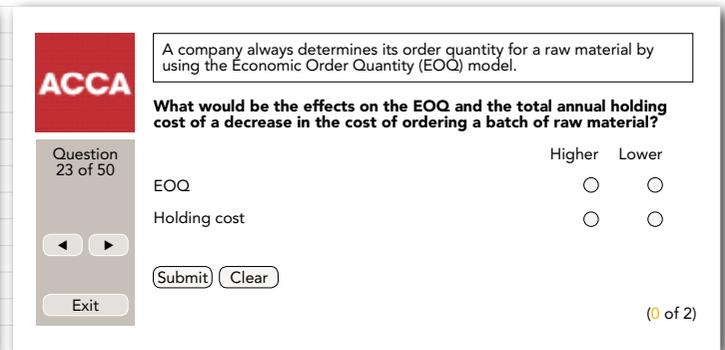
Submit Clear

Question 46 of 50

Exit

(0 of 1)

FIGURE 4: MULTIPLE-RESPONSE MATCHING QUESTIONS



A company always determines its order quantity for a raw material by using the Economic Order Quantity (EOQ) model.

What would be the effects on the EOQ and the total annual holding cost of a decrease in the cost of ordering a batch of raw material?

	Higher	Lower
EOQ	<input type="radio"/>	<input type="radio"/>
Holding cost	<input type="radio"/>	<input type="radio"/>

Submit Clear

Question 23 of 50

Exit

(0 of 2)

Although multiple-response questions appear to be very similar to MCQs, you have to select more than one option by clicking on the square 'tick boxes' next to your chosen options, then clicking the 'Submit' button. If you select an incorrect number of answer options and then click 'Submit', a pop-up box will remind you of the number of options you are required to select.

Answering multiple-choice and multiple-response questions

For MCQs and multiple-response questions, the incorrect answer options have been chosen carefully because they are common incorrect responses to the question. At first glance, all answer options may appear plausible. It is therefore important to take the time to read all the answer options carefully rather than choosing those that look most obviously correct. If the question involves a calculation, work out the answer rather than simply selecting the option that looks most likely to be correct.

If you find a particular question difficult, start by discounting those answer options that you know are incorrect and then concentrate in more detail on those that remain.

Multiple-response matching questions

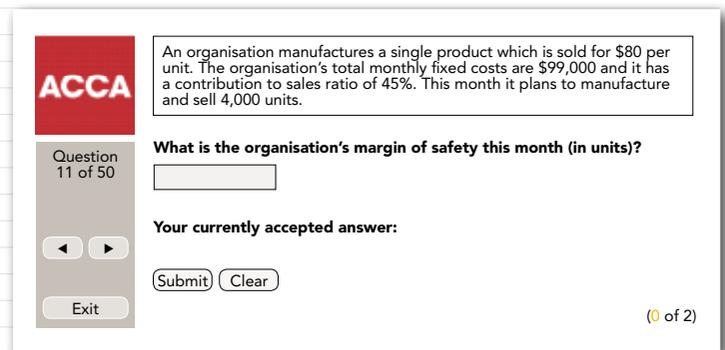
These questions are always worth two marks. Figure 4, from a demo F2 CBE, shows the standard layout for multiple-response matching questions.

This type of question comprises a question and several statements related to the question. Each statement is accompanied by several response options such as 'true' or 'false'. Each statement should be matched to its correct response by clicking on the corresponding radio button. Each statement needs to be completed correctly for the award of two marks. If only one statement is completed correctly you will not be awarded any marks. If you do not select a response for each statement, when you click 'Submit', a pop-up box will appear to remind you of the total number of responses that you should select.

Number entry questions

These questions, as shown in Figure 5 taken from the demo F2 CBE, are always worth two marks.

FIGURE 5: NUMBER ENTRY QUESTION



An organisation manufactures a single product which is sold for \$80 per unit. The organisation's total monthly fixed costs are \$99,000 and it has a contribution to sales ratio of 45%. This month it plans to manufacture and sell 4,000 units.

What is the organisation's margin of safety this month (in units)?

Your currently accepted answer:

Submit Clear

Question 11 of 50

Exit

(0 of 2)

This is the only question type in a CBE where you need to enter the correct answer yourself, rather than choose from a list of options. To gain marks for a correct value, remember that numerical answers should be submitted without commas and using the full stop as a decimal point (eg 10530.25).

If you enter any letters or symbols that the CBE system does not recognise, the system will either change or ignore your answer. Therefore, before you press the 'Submit' button, check that you have entered your answer using the correct format. Once you have clicked 'Submit', check that your response is presented correctly next to the label 'Your currently accepted answer:'. If it does not appear as you intended, press 'Clear' and try again.

SUMMARY

Completing a CBE is straightforward when you are familiar with what is required. Before you take your first CBE, go to www.accaglobal.com/students/study_exams/exams/cbe/demo and try out the demo exams on the ACCA website. Remember, the computer will make sure that you select the correct number of answer options for each question; it is up to you to make sure that you choose the correct ones. ■