

## Principal Assessor Report 2003

**Assessment Panel:**

Computing and Information Technology

**Qualification area**

**Subject(s) and Level(s)  
Included in this report**

Computing Higher Level

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## Statistical information: update

|                                  |                        |
|----------------------------------|------------------------|
| <b>Number of entries in 2002</b> | 4303 (pass mark stage) |
| <b>Pre appeal</b>                |                        |

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|----------------------------------|------------------------|
| <b>Number of entries in 2003</b> | 4677 (pass mark stage) |
| <b>Pre appeal</b>                |                        |

## General comments re entry numbers

Based on these figures there seems to be another increase in the number of candidates being presented for Higher Computing.

## Grade boundaries at C, B and A for each subject area included in the report

|          |    |
|----------|----|
| Grade A: | 69 |
| Grade B: | 58 |
| Grade C: | 47 |

### General commentary on passmarks and grade boundaries

- While SQA aims to set examinations and create mark schemes which will allow a competent candidate to score a minimum 50% of the available marks (notional passmark) and a very well-prepared, very competent candidate to score at least 70%, it is almost impossible to get the standard absolutely on target every year, in every subject and level
- Each year we therefore hold a passmark meeting for each subject at each level where we bring together all the information available (statistical and judgmental). The Principal Assessor and SQA Qualifications Manager meet with the relevant SQA Business Manager and Statistician to discuss the evidence and make decisions. The meetings are chaired by members of the senior management team at SQA
- We adjust the passmark downwards if there is evidence that we have set a slightly more demanding exam than usual, allowing the pass rate to be unaffected by this circumstance
- We adjust the passmark upwards if there is evidence that we have set a slightly less demanding exam than usual, allowing the pass rate to be unaffected by this circumstance
- Where the standard appears to be very similar to previous years, we maintain similar grade boundaries
- An exam paper at a particular level in a subject in one year tends to have a marginally different set of grade boundaries from exam papers in that subject at that level in other years. This is because the particular questions are different. This is also the case for exams set in centres. And just because SQA has altered a boundary in a particular year in say Higher Chemistry does not mean that centres should necessarily alter boundaries in their prelim exam in Higher Chemistry. The two are not that closely related as they do not contain identical questions
- Our main aim is to be fair to candidates across all subjects and all levels and maintain standards across the years, even as syllabuses evolve and change

### Comments on grade boundaries for each subject area

The grade boundaries for the 2002 examination were 48, 59 and 70. It was felt that this year's examination was slightly more difficult than last year's which is why we decided to lower the grade boundaries by 1 mark.

## **Comments on candidate performance**

### **General comments**

Although some markers reported good performances the bulk of markers' reports would tend to suggest that there were a higher number of poorer responses than last year. There were still too many candidates giving vague answers which lacked technical detail even when this was clearly asked for in the question.

### **Areas of external assessment in which candidates performed well**

Generally candidates performed well in questions which required the recall of knowledge such as giving a definition of a term. Question 13 on standard file formats was generally well done. The calculation of the storage requirements for a scanned image was generally well done.

Candidates who attempted the Multimedia Technology section seemed to do well in that section.

### **Areas of external assessment in which candidates had difficulty**

Generally candidates have difficulty with problem solving in an unfamiliar context. Many candidates tried to give standard responses which did not answer the question. For example they might latch on to a word in the question and write down everything that they knew about it rather than answering the question.

Some questions which should have been straightforward were not answered as well as expected. For example many candidates confused conditional loops (eg repeat..until) with conditional statements (e.g. if..then). Also, in the Artificial Intelligence section most candidates confused the idea of recursion with inheritance.

When calculating addressable memory, a large number of candidates used the data bus width instead of the address bus width to calculate the number of locations. Others calculated the number of locations correctly but did not multiply by the word size.

## **Recommendations**

### **Feedback to centres**

Centres should stress to candidates the need for detailed, accurate and complete descriptions of computing knowledge. A level of depth and breadth appropriate to Higher Level is required.

Candidates should be reminded that when a question asks for a description or an explanation full marks will not be given for an answer which simply states the name of a device or the name of a feature of an application package.

Problem solving questions often require candidates to relate their answers to the context of the question. Many candidates simply write down all that they know without relating it to the context.

To achieve a grade A or B candidates must be able extract relevant knowledge from the text of a question and use that knowledge to solve a given problem which may be set in an unfamiliar context.