

Principal Assessor Report 2005

Assessment Panel:

Computing and Information Systems

Qualification area

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

Computing Higher (Old)

Statistical information: update

Number of resulted entries in 2004	5,088
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Number of resulted entries in 2005	1,943
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General comments re resulted entry numbers

The paper was dual-running with the new arrangements. The combined total for the two examinations shows a decrease in the number of presentations overall.

Statistical Information: Performance of candidates

Distribution of awards including grade boundaries

Distribution of awards	%	Cum %	Number of candidates	Lowest mark
Maximum Mark- 100	-	-	-	-
A	16.8	16.8	327	72
B	26.2	43.1	510	60
C	25.8	68.9	502	49
D	12.4	81.3	241	43
No award	18.7	100.0	363	-

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 arrangements evolve and change.

Comments on any significant changes in distribution of awards/grade boundaries

The small change to the boundaries from last year is in response to an increase in demand in comparison with last year's examination.

Comments on candidate performance

General comments

There was a wide range of candidate responses. Whilst there are many very good candidates, there are still a number of candidates who are clearly being presented at the wrong level. Performance in the actual exam is exceptionally poor in some cases, with some candidates gaining less than twenty marks. Approximately 13% of candidates gained less than 40% overall.

Areas of external assessment in which candidates performed well

Candidates performed better in those questions that tested their ability to recall knowledge and less well in the problem solving situations. Fewer candidates made errors in their choices of optional questions.

Areas of external assessment in which candidates had difficulty

Candidates continue to experience difficulties with questions in the following areas:

- producing an algorithm
- parameter passing
- clear layout of calculations, often resulting in simple arithmetic errors
- use of technical terms appropriately
- tracing a solution, NLP and neural nets in Artificial Intelligence
- peer-to-peer versus client/server advantages/disadvantages and OSI model in Computer Networking
- the Computer Programming topic was poorly done by most candidates who attempted it
- depth of technical detail lacking (ie of storage media) in Multimedia Technology

Recommendations

Feedback to centres

This is the last examination of the “old” syllabus, however the feedback given below is transferable to the new arrangements.

In the light of the very poor performance of some candidates, Centres must look at presentation policies. There are candidates being presented who are clearly unsuited to this level. Subject specialists are in the best position to give guidance to candidates, parents and others regarding realistic expectations in Higher Computing. Where there is a large or uniform discrepancy between the Centre’s estimates and the actual grades gained, Centres should seek advice on how to improve the accuracy of estimates submitted to the SQA.

There are many instances of candidates not reading questions, for example question 23 (d), on writing data to memory, was answered by a significant proportion of candidates as though it were on the fetch/execute cycle. Similarly, in the context-based questions, candidates must relate the answer to the context to gain full credit.

Candidates must improve the layout of calculations if they are to cut down on careless errors.

Several types of question appear every year, approaches to these “set piece” questions should be rehearsed.

A deeper knowledge of technical terms would bolster the more “woolly” answers given by some candidates.

Note must be taken of the number of marks allocated to questions; this gives candidates an indication of the depth of response required. Single word answers are inappropriate in the majority of cases and should be avoided.

Wording of questions should be emphasised to candidates. Differences between responses required by “explain”, “describe”, “state” and “name” need to be clarified.