

Principal Assessor Report 2005

Assessment Panel:

Computing and Information Systems

Qualification area

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

Intermediate 2 Computing (New arrangements)

Statistical information: update

Number of resulted entries in 2004	-
Number of resulted entries in 2005	1,307

General comments re resulted entry numbers

The numbers sitting this examination matched with the missing numbers from the old arrangements. I would therefore suggest that the numbers are roughly similar to the past three years.

Statistical Information: Performance of candidates

Distribution of awards including grade boundaries

Distribution of awards	%	Cum %	Number of candidates	Lowest mark
Maximum Mark- 100	-	-	-	-
A	15.6	15.6	204	70
B	22.3	37.9	292	60
C	25.5	63.4	333	50
D	10.4	73.8	136	45
No award	26.2	100.0	342	-

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

Distribution of awards is similar to the old arrangements Int2 examination in 2004 when the make-up of the candidates in terms of year group was similar.

Comments on candidate performance

General comments

The paper was of a similar standard to the specimen paper and candidates performed to a similar standard as to the old arrangements. Some slight improvement in the use of technical vocabulary used in descriptions; but there still seems to be an inability to use their practical skills knowledge to answer software development questions

Areas of external assessment in which candidates performed well

Sections I & II

The majority of section I, with the exception of question 5 and 8, was attained by most of the candidates. The stages of the software development process were well understood by candidates. The differences between an interpreter and a compiler were answered reasonably well.

Artificial Intelligence option

Answers to the Turing Test question were excellent. The majority of candidates showed that they are excellent interpreters of knowledge bases.

Computing Network option

Good response to the questions on filtering and threats to networks.

Multimedia Technology option

Excellent problem solving within the video data questions.

Areas of external assessment in which candidates had difficulty

Section I & II

Although software development is a major practical exercise few candidates seem to know the difference between a conditional and a fixed loop; the existence of string variables; and it is disturbing to find so few candidates who can code simple problems.

Very few candidates made a good attempt at calculating storage requirements of an image.

Questions relating to standard file formats were not well answered.

The functions of an interface were answered poorly in comparison to previous years.

Artificial Intelligence option

Very few students seem capable of tracing the solution to a Prolog query, which I would regard as being fundamental to this option.

Computer Networking option

Little evidence of knowledge of WLAN's and WPAN's by the majority of candidates.

Understanding of backup strategy not fully understood.

Recommendations

Feedback to centres

Improvements require to be made in linking practical skills; e.g tracing Prolog queries and coding; to theoretical aspects of the curriculum. I'm sure that the majority of candidates can use a fixed loop but very few seem able to explain how it works or give an example in a familiar software development environment.

It would seem that some of the new course content; e.g. convergent technologies, WLAN, smart phones, etc needs to be a little more thoroughly covered.

A little more practice could be made in problem solving questions.