



## External Assessment Report 2013

Subject(s)	Computing
Level(s)	Intermediate 2

The statistics used in this report are pre-appeal.

This report provides information on the performance of candidates which it is hoped will be useful to teachers/lecturers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding. It would be helpful to read this report in conjunction with the published question papers and marking instructions for the examination.

# Comments on candidate performance

## General comments

This year's Intermediate 2 exam was of a similar standard to previous years'. This was reflected in the return to the pre-2012 attainment statistics. The majority of candidates answered well, but a number of candidates lost marks by not reading questions carefully enough and giving answers that did not relate to the question.

## Areas in which candidates performed well

### Computer Systems and Software Development

Question 13e)ii) & 15a): most candidates know the Software Development stages and can apply them to problems.

### Artificial Intelligence

Question 19: a steady improvement in the answering of trace tables and semantic nets.

### Computer Networking

Question 21f): the majority of candidates know the benefits of buying goods online.

### Multimedia

Question 23a)ii): candidates are becoming better at calculating memory requirements and converting into appropriate units.

## Areas which candidates found demanding

### Computer Systems and Software Development

- ◆ Question 1: a number of candidates did not give an 8-bit answer.
- ◆ Question 5: a small number of candidates answered this question with an economic factor such as falling costs of communications hardware or increase in global markets.
- ◆ Question 10: some candidates are unsure of what constitutes a logical operator.
- ◆ Question 13e)iv): many candidates understand the need for standard file formats, but are not clear in their answers that they understand what is actually happening. Many candidates related problems with software compatibility with hardware issues.
- ◆ Question 14e): centres are advised to ensure that candidates don't come out with stock answers but use their knowledge and problem solving skills to answer the question.
- ◆ Question 15f): many candidates are used to giving the advantages of e-mail but found it difficult to give the dis-advantages.

## **Artificial Intelligence**

Question 17a): this question was not always answered well. Simple answers such as 'navigating around objects' are sufficient.

## **Computer Networking**

Question 20a)i): a small number of candidates recognised that a Wireless Wan would be required rather than a WAN.

Question 21d): many candidates were unsure what a URL is and what it's used for.

Question 21e): some candidates were unfamiliar with marketing as an e-commerce service.

Question 22b): the three parts of a backup strategy — separate media, separate location, and regularity — were not always expressed well.

## **Multimedia**

Question 23a)i): clear descriptions of the purpose of CCD's were few. All that was required was 'to capture light coming in through the lens'.

Question 24b)i): a small number of candidates were able to explain that MPEG compression reduces file size by only saving the changes between frames rather than the entire frames.

Question 25b): a number of candidates did not know that VRML stands for Virtual Reality Markup Language.

## **Advice to centres for preparation of future candidates**

Candidates should take their time and read the questions carefully and answer relevant to the question.

Candidates should try to answer in as much technical detail as they can, eg 'standard file formats allow the file to be read by any word processor' rather than 'can be opened by any computer'.

Centres are advised to ensure candidates understand logical operators and how to use them.

## Statistical information: update on Courses

### Intermediate 2

Number of resulted entries in 2012	3074
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Number of resulted entries in 2013	3060
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## Statistical information: Performance of candidates

### Distribution of Course awards including grade boundaries

Distribution of Course awards	%	Cum. %	Number of candidates	Lowest mark
Maximum Mark 100				
A	33.4%	33.4%	1022	70
B	26.3%	59.7%	804	60
C	19.1%	78.8%	584	51
D	7.5%	86.2%	228	46
No award	13.8%	100.0%	422	-

## General commentary on grade boundaries

- ◆ While SQA aims to set examinations and create marking instructions which will allow a competent candidate to score a minimum of 50% of the available marks (the notional C boundary) and a well prepared, very competent candidate to score at least 70% of the available marks (the notional A boundary), it is very challenging to get the standard on target every year, in every subject at every level.
- ◆ Each year, SQA therefore holds a grade boundary meeting for each subject at each level where it brings together all the information available (statistical and judgemental). 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 management team at SQA.
- ◆ The grade boundaries can be adjusted downwards if there is evidence that the exam is more challenging than usual, allowing the pass rate to be unaffected by this circumstance.
- ◆ The grade boundaries can be adjusted upwards if there is evidence that the exam is less challenging than usual, allowing the pass rate to be unaffected by this circumstance.
- ◆ Where standards are comparable to previous years, similar grade boundaries are maintained.
- ◆ 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, and the mix of questions, are different. This is also the case for exams set in centres. If SQA has already altered a boundary in a particular year in, say, Higher Chemistry, this 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.
- ◆ SQA's main aim is to be fair to candidates across all subjects and all levels and maintain comparable standards across the years, even as arrangements evolve and change.