



External Assessment Report 2011

Subject	Computing
Level	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

The 2011 paper was shown to be of similar standard to the previous year's papers and the performance of many of the candidates was excellent. Very few papers were left with incomplete answers, but as in previous years many candidates' answers were very brief and lacked the technical detail that distinguishes between those who undertake the Course and those who are exposed to the technology in their everyday lives.

Areas in which candidates performed well

Computer Systems and Software Development

Question 2: most candidates knew how viruses are spread.

Question 11 (b): readability is well understood.

Question 13s (e)(ii) and 14 (c) show that the majority of candidates know the standard algorithms.

Artificial Intelligence

Questions 18 (a) and (b) show that candidates are experienced in using trace tables.

Networking

Questions 20 (b) and (h): the need for an ISP and the reasons for internet filtering were well understood by the candidates.

Multimedia

Question 23 was well attempted with the exception of the benefits of using Midi.

Areas which candidates found demanding

Computer Systems and Software Development

Question 5: many candidates are still using file suffixes as answers for standard file formats.

Question 13 (g): many candidates assume that a laser printer must be of higher resolution than an ink-jet printer; this is not necessarily true and should not be used as a standard comparison between the two types of printer. Some candidates are still using non-specific language such as 'faster'.

Question 14 (a)(i): when calculating the storage requirements for photographs, too many students forgot that DPI must be squared.

Question 14 (a)(ii): many of the functions of an interface given were too simplistic.

Question 15 (a): objects and operations were not clearly labelled in candidates' answers and were often mixed up, eg a text object with a graphic operation.

Question 15 (c): once again, the functions of an operating system were badly answered by many candidates.

Question 15 (e): the purpose of anti-virus software was often given as vague answers, rather than the simple answers of detecting or removing viruses.

Artificial Intelligence

Question 16 (c): many students are using non-technical names for USB flash drives such as USB sticks; correct technical terms must be used.

Question 18 (c): trace tables continue to be problematic for many candidates even though they appear every year.

Networking

Question 19 (a): unicast transmission was not well explained.

Question 20(c): URL stands for **Uniform** Resource Locator, **not Universal** Resource Locator.

Question 21 (b): the use of the term 'broadband' was used too frequently as a type of internet connection.

Question 21 (e): the question on Host Name Resolution was not well answered; many candidates were looking for something more complicated than it was.

Multimedia

Question 22 (b): the correct technical term of 'flash memory' was not always given by the candidates.

Question 24 (d): the 3D attributes of texture and rendering are not well known to the majority of candidates.

Question 24 (f): names of laws such as the Copyright, Designs and Patents Act must be given in full.

Advice to centres for preparation of future candidates

General

Ensure the correct use of technical terms, eg USB flash drive.

Ensure that their answers are precise and fully answer the question, **not** 'faster', 'easier', 'cheaper', etc.

Centres should ensure that candidates have a good understanding and are able to explain the functions of operating systems and interfaces.

Learn how to set out trace tables appropriately.

Statistical information: update on Courses

Number of resulted entries in 2010	3,079
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Number of resulted entries in 2011	3,154
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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	32.0%	32.0%	1,008	70
B	24.7%	56.6%	778	60
C	21.0%	77.6%	662	50
D	8.0%	85.6%	252	45
No award	14.4%	100.0%	454	-

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, therefore, SQA 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 Head of Service 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.