

Principal Assessor Report 2004

Assessment Panel:

Information Systems

Qualification area

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

Information Systems Higher

Statistical information: update

Number of entries in 2003 (Pre Appeal)	2848
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Number of entries in 2004 (Pre Appeal)	2833
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General comments re entry numbers

The number of entries was down slightly this year but still a healthy number of entries.

Statistical Information: Performance of candidates

Distribution of awards

A	10.5%
B	24.9%
C	29.0%
D	13.6%
No Award	22.0%

Comments on any significant changes in percentages or distribution of awards

Disappointing, the same percentage of candidates achieved Grade A as in Diet 2003. Very slight increase in percentage of candidates achieving a Grade B (increase of 0.2% from 2003 and very similar to Diet 2001 and Diet 2002). The same percentage of candidates achieved a Grade C as in 2003, and this is very similar to Diet 2001 and Diet 2002. Similar percentage of candidates achieving no award (decrease of 0.1% from 2003 although very similar to Diet 2001 and less than Diet 2002). Overall, there was only a very slight increase in the percentage of candidates who passed the course, but this was an increase on last Diet 2002 and Diet 2001.

Grade boundaries for each subject area included in the report

Distribution of awards	%	Cum %	Number of candidates	Lowest mark
A	10.5	10.5	299	70
B	24.9	35.4	706	60
C	29.0	64.4	821	50
D	13.6	78.0	384	
No award	22.0	100.0	623	

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 grade boundaries for each subject area

Question papers and their associated marking schemes are designed to be of the required standard and to meet the assessment specification for the subject/level concerned.

For National courses the examination paper(s) are set in order that a score of approximately 50% of the total marks for all components merits a grade C (based on the grade descriptions for that grade), and similarly a score of 70 % for a grade A. The lowest mark for a grade B is set by the computer software as half way between the C and A grade boundaries.

This year, 'a priori' boundaries were set (ie grade boundaries of C at 50, B at 60 and A at 70), and corresponding degrees of difficulty in the Question paper were very effectively targeted.

Comments on candidate performance

General comments

The average mark for Coursework was 23.5 out of 30 (78%) which is within one per cent of what it has been since 2000 when the subject was introduced. Generally, in the Question paper, the overall response from candidates was more bunched in the middle mark range with very few very high scores of 50, or more, but also very few very low scores of 15 or less. Candidates performed reasonably well in the core questions, particularly the database normalisation question and most markers noted a notable improvement in this area compared with last year. Again, candidates tended to respond to questions in a general manner, rather than describing a solution to the particular scenario in the question – thus candidates showed limited ability to apply knowledge in a problem-solving context. In these types of questions, candidates tended to give a lower level response based on their recall of knowledge without paying any attention to the problem requiring to be solved: based on the given scenario.

This year there was a marked improvement in the candidates' understanding of the normalisation process and consequently the marks for this question were significantly better than in previous years, with a significant number of candidates gaining full marks

The average mark for the written paper was 31.5 out of 70 which is down on last year's average of 34.4.

Areas of external assessment in which candidates performed well

In the core section, the normalisation database question (Question 1) was done very well by the majority of candidates with a significant percentage scoring full marks. The first Information Organisation question (Question 2) was also answered very well, a significant improvement in the responses to this question compared to previous years. In the optional topics, expert systems questions were answered the best with candidates scoring particularly well in questions 9 and 10.

Areas of external assessment in which candidates had difficulty

In the core section, questions 3 and 4 were answered very poorly indeed. In question 3 (a), the majority of candidates either did not know why this flat file database was unsuitable or they responded in general terms with no reference to the particular problems with this flat file database. In questions 3 (c) and (d), a practical knowledge on the use of a database is required to answer these questions but many candidates found it difficult to explain how these tasks could be performed using the database with which they were familiar.

In question 4 (a) the majority of candidates did not describe the hardware, software and communication requirements in any detail. Most just listed the items with no link to the scenario and no apparent understanding of the structure of a networked information system. In question 4 (c) a significant amount of marks were lost (up to 5) as candidates did not select a suitable contemporary information system. Many candidates chose the Internet without referring to a particular web site that they had studied or become familiar.

In the Computer Application Software option, candidates found difficulty with question 6 in that the majority could not identify four features required by the software to produce the effects in the leaflet and could not identify two suitable contemporary developments relating to the functionality of application software. Very few candidates were able to give a suitable stimulus to development for the contemporary development.

In the Hypermedia option, a significant number of candidates did not select a suitable contemporary

development in the area of hypermedia in question 11 (d). Consequently, up to 5 marks were lost here because of this. More difficulty, however, was experienced with question 12 where the vast majority of candidates could not answer question parts (b) and (c).

Recommendations

Feedback to centres

Presenting centres should stress to candidates that their responses should not be vague but detailed, accurate and complete: a level of depth and breadth appropriate to Higher level is required. A question which asks for a description or an explanation will not be given full marks if the answer simply states the name of an information system or the feature of an application package. The use of appropriate technical terminology also has to be encouraged.

Centres also need to stress to candidates that problem solving questions often require candidates to relate their answers to the context of the question. They have to use the information supplied in the scenario. Many candidates simply write down all that they know without relating it to the context.

Since the Question paper only has 70 marks available in an exam lasting 2.5 hours, asking candidates for 2 responses for 1 mark question is unavoidable if Higher standards are to be met. Centres should ensure that candidates are aware of the need to give as full and focused answers as possible to maximize attainment.