

Principal Assessor Report 2003

Assessment Panel:

Computing

Qualification area:

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

Information Systems – Advanced Higher

Statistical information: update

| | |
|----------------------------------|-----|
| Number of entries in 2002 | 112 |
| Pre appeal | |

| | |
|----------------------------------|----|
| Number of entries in 2003 | 85 |
| Pre appeal | |

General comments re entry numbers

Concern has been expressed within the setting and marking team that the entry figures are on the decrease.

Grade boundaries at C, B and A for each subject area included in the report

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|-----------|----|
| Upper A - | 84 |
| Lower A - | 70 |
| B - | 60 |
| C - | 50 |

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 syllabuses evolve and change

Comments on grade boundaries for each subject area

The grade boundaries are similar to those in previous years and in-line with standardised 'a priori' boundaries.

Comments on candidate performance

General comments

Overall, the performance of candidates in the external exam component has improved. What was especially pleasing this year was that candidates performed significantly better in Section 1 than in previous years. The setting team believe that the 2003 exam paper was of a similar standard and was as demanding as the papers set in previous years.

Areas of external assessment in which candidates performed well

In Section I, candidates did demonstrate knowledge of the normalisation process in question 1.

Candidates produced good answers to questions in Section II Part B (Natural Language Processing). In particular, questions 7 and 8 were handled well.

Similarly, candidates coped well with questions in Section II Part C (Systems Analysis and Design). Although answered sometimes lacked the necessary depth of knowledge, the vast majority of candidates did demonstrate knowledge of the topic. In particular, most candidates produced a reasonable Data Flow Diagram in question 9.

Areas of external assessment in which candidates had difficulty

In Section I question 2, although most candidates produced a reasonable entity life history diagram, many were unable to discuss the purpose of modelling techniques such as data dictionaries, entity event matrices and entity life history.

Many candidate responses in Section II Part A (Multimedia) were poor and failed to demonstrate any detailed understanding of the topic. Several Markers compared candidate answers to those that would be accepted at Intermediate 2 level.

Recommendations

Feedback to centres

Candidate performance in the exam improved significantly. The setting and marking team feel that this improvement was due largely to better preparation for the exam and more familiarisation with the exam format. In particular, responses to questions in Section I were much better than in previous years.

Section I

Candidates are now demonstrating knowledge of the normalisation process. However, many candidates seem to have difficulty in adapting the technique used at Higher to the more complex situations that they are presented with at Advanced Higher. Rather than identifying one single entity with repeating data at UNF, large numbers of candidates identified multiple entities — this led to difficulties with later stages in the normalisation process.

Despite being able to produce a reasonable entity life history diagram, many candidates were unable to *describe* the purpose of modelling technique such as data dictionaries, entity event matrices and entity life history diagrams.

Section II

Candidates answering questions in Section II Part B (Natural Language Processing) performed well. Questions 7 and 8 in particular produced good responses.

Candidates answering questions in Section II Part C (Systems Analysis and Design) again performed well. The vast majority of candidates demonstrated a good understanding of the topic. Where candidates fell down was in demonstrating a *depth* of understanding and gave only superficial responses to questions that were expecting them to apply knowledge. Most candidates produced a reasonable Data Flow Diagram in question 9

Many candidates answering questions in Section II Part A (Multimedia) failed to read the question carefully enough and responses were often irrelevant. Many Markers commented on the lack of detailed responses that were produced — indeed, many responses were compared with those that would be acceptable at Intermediate 2 level. For example, in question 3(b) superficial responses such as “reduce frame rate” were provided despite the fact that this would clearly affect the video quality. Candidates need to show better understanding of analysis, design and evaluation of a multimedia product. They should also be aware of the hardware, software and communication constraints that affect the design of a multimedia product.