



External Assessment Report 2009

Subject	Technological Studies
Level	Advanced Higher

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

Generally this was a well received Question Paper. Although the candidature is small, it is clear that those proceeding to Advanced Higher continue to be able, highly motivated candidates. Section A was well attempted, and Section B, though challenging, was accessible to all candidates. Most candidates appeared to have sufficient time to attempt both questions in Section B. There were some very good marks gained this year.

Areas in which candidates performed well

Question 4 (low level programming) and question 6 (method of sections) both elicited excellent responses.

Areas which candidates found demanding

Some candidates found Question 1 (binary counters) demanding.

The combinational logic diagram in Question 3 was in many instances poorly drawn, with gates missing – this is Higher material which candidates coming via other routes must cover.

In Question 8(b), candidates found the “explain” part difficult, and many misinterpreted the question.

However, there were no questions that presented a clear challenge over the whole group – this was overall a very accessible Question Paper.

Advice to centres for preparation of future candidates

Across the sample, there are no areas being missed by centres.

However, continued attention must be given to improving the quality of “explain” and “describe” questions; care needs to be exercised with components of forces (choice of ‘sin’ and ‘cos’ still causes confusion); binary counters possibly need further reinforcement.

Statistical information: update on Courses

Number of resulted entries in 2008	90
Number of resulted entries in 2009	85

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	35.3%	35.3%	30	67
B	20.0%	55.3%	17	58
C	18.8%	74.1%	16	49
D	8.2%	82.4%	7	44
No award	17.6%	100.0%	15	-

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.