



External Assessment Report 2011

Subject	Product Design
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

Candidate performance, this year, was generally similar to performance in previous years.

It is apparent that the majority of centres prepare candidates well for the examination paper and this results in most candidates displaying appropriate examination technique.

Similarly, in the design assignment, it is apparent that most centres are administering the assignment appropriately and ensuring that candidates are following the guidance document for this activity.

Areas in which candidates performed well

In the design assignment, candidates performed best in the 'initial ideas' section, where the vast majority of candidates scored in excess of 8 out of 10.

Similarly, the final graphic was usually well attempted with many candidates scoring 4 or 5 out of 5.

In the examination, candidates performed well in virtually every question. The exceptions to this are itemised in the next section of this report.

Areas which candidates found demanding

In the examination, most candidates, when asked to 'state the name' or to 'state', do precisely that. Unfortunately, a significant number of candidates are less successful when asked to 'describe' or 'explain'.

The three Units in the Course all contribute to the knowledge base required for the exam and candidates should, therefore, be able to tackle every question in the examination paper. It is thus disappointing when a significant number of candidates who are less successful do not even attempt to answer some questions.

Specifically, the most poorly answered questions were:

Q1(b) Ergonomics — confusion between anthropometrics, physiology and psychology

Q2(a) Metal alloys — few candidates were able to name two alloys

Q3 Product evaluation — vague or superficial responses from many candidates

In the design assignment, a significant number of candidates made virtually no changes between their chosen initial idea and their final design proposal, thus scoring poorly for 'development'.

Advice to centres for preparation of future candidates

Many centres need to make no changes at all to their current practice.

It is advisable to scrutinise each candidate's component marks when the data is released by SQA. It is then apparent how each candidate performed in the two elements of the external assessment which contribute to the final total of 100 marks. If a trend is apparent, then centres can take appropriate steps to maximise candidates' scores in future.

Design assignment

Centres should ensure that the green fly-leaves for the assignment are completed and signed by each candidate. Similarly, the back of all eight sheets should be numbered 1/8, 2/8, etc and have the candidate's name and school written on each.

Centres should attempt to ensure that candidates produce work which is clearly legible. A significant number of candidates produce work which is extremely difficult to read; this is sometimes due to poor handwriting but it can also be due to candidates 'highlighting' text in such a way that it has the opposite effect. Some candidates produce typed text in their design assignments but this can sometimes be such a small font that it is similarly, virtually illegible. Centres must bear in mind that marks are awarded for clarity of communication and it is all too easy for candidates to lose marks here if they try to do something 'fancy' with text.

Candidates should ensure that their ideas **and** their design proposal address the theme of the design assignment.

Candidates should be advised that the following activities are unlikely to attract marks:

- ◆ Copying graphic images from books or the internet and including them as 'initial ideas'
- ◆ Copying anthropometric data tables
- ◆ Copying generic cross-sectional diagrams of injection moulding machines (and the like)

Examination

Centres should ensure that they use past papers as a preparation for the examination as candidates therefore become familiar with the style and layout of the paper.

Centres should become familiar with the marking schemes and advise candidates of the standard of responses required to gain marks.

Centres should ensure that candidates understand the difference between 'state', 'explain' and 'describe', and how these different terms should affect their response.

Statistical information: update on Courses

Number of resulted entries in 2010	995
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Number of resulted entries in 2011	993
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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	33.1%	33.1%	329	72
B	27.3%	60.4%	271	62
C	19.3%	79.8%	192	52
D	5.3%	85.1%	53	47
No award	14.9%	100.0%	148	-

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.