



External Assessment Report 2012

Subject(s)	Geology
Level(s)	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

Most of the candidates were well prepared. Some were excellent with 48.3% gaining an A or B grade. Around 86% passed with the lowest mark being 38%. The means for the written paper and fieldwork were 55.9/95 and 10.3/15 respectively.

Areas in which candidates performed well

Q 3(a) Safety precautions in the field.

Q 4(d) and 6(e) Placing geological events in order from a map and block diagram.

Q 5(a) Environments of deposition for different sedimentary rocks.

Q 5(b) Identifying the source of sand grains from their shape and surface texture.

Q 5(d)(ii) Factors that aid the preservation of fossils.

Q 7(d) using borehole data to show the direction of continental drift.

Q 8(a) and (b) Naming fossils and fossil parts.

Areas which candidates found demanding

Q 1(a) and (b) Identifying minerals and rocks.

Q 3(d) Stating how it could be deduced that the strength of melt water flow had changed.

Q 4(a) Completing the blank face of a block diagram.

Q 5(c) Describing how a coral atoll is formed.

Q 6(b) Using a protractor to measure to measure the strike direction.

Q 6(c) Working out movement direction on either side of a fault.

Q 7(c) Calculating the speed of continental drift.

Q 9(a) Describing how a seismometer works.

Q 9(e) Accurately drawing a reflected seismic wave using a protractor.

Q 10(d)(iii) Working out a percentage change.

Q 10(d)(iv) Working out a simple whole number ratio.

Advice to centres for preparation of future candidates

Fieldwork

Standards remained high.

Written Paper

Centres should consider how best to practise skills which candidates require to tackle questions in the external examination. Weaknesses included:

- ◆ calculating
- ◆ using a protractor
- ◆ working out movements on either side of a fault

- ◆ describing atolls and isostasy
- ◆ describing how a seismometer works

Statistical information: update on Courses

Intermediate 2

Number of resulted entries in 2011	25
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Number of resulted entries in 2012	29
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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 110				
A	20.7%	20.7%	6	77
B	27.6%	48.3%	8	66
C	34.5%	82.8%	10	55
D	0.0%	82.8%	0	49
No award	17.2%	100.0%	5	-

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.