



## External Assessment Report 2014

Subject(s)	Geology
Level(s)	Higher

The statistics used in this report are prior to the outcome of any Post Results Services requests

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

Two new centres presented this year. All centres had prepared candidates very thoroughly. Some very good performances again this year from candidates that were studying the subject by distance learning. The standard was very high with two candidates almost gaining full marks.

## Areas in which candidates performed well

Question 1: The vast majority of candidates attained good marks here as was intended of this opening question.

Questions 3: (a), (b) Most candidates coped well with the concept of isostatic uplift.

Question 5: A variety of skills and knowledge was tested here based on the rock exposure. Most candidates did well here despite the fact that we had anticipated the section on radiometric dating to prove difficult.

Question 6: based on the completion of a geological base map we had anticipated that this might be challenging, but many candidates were able to access the majority of the marks here.

Questions 7, 8 and 9: Ores proved to be the most popular essay, possibly because it may be the last topic to be taught by many centres. All essays were answered well and showed as high a standard as last year's excellent performance.

## Areas which candidates found demanding

Question 2: The inverted sequence borehole logs were intended to be very challenging and this is indeed how the candidates found it. No candidate managed to attain full marks here.

Questions 3: (c), (d), (e) only the most able candidates performed really well here, but some showed a considerable depth of knowledge to gain full marks.

## Advice to centres for preparation of future candidates

Continue to set aside plenty of time to allow candidates to practise three-point problems and geological map work and cross-section interpretation.

Continue to get your candidates out on as many fieldtrip experiences as possible. Not only is outdoor education more stimulating, it also enhances the overall understanding of geological concepts and helps the students fit the pieces of knowledge together. Take the opportunity to allow candidates time to interpret rock exposures for themselves. Geological scientists

require acute problem-solving skills and the ability to make reasoned educated guesses — the full evidence is rarely available. Encourage candidates to make detailed written and pictorial records after careful visual observations.

Please encourage students to record and present information by sketching. Not all images should be digital.

## Statistical information: update on Courses

Number of resulted entries in 2013	64
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Number of resulted entries in 2014	49
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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	32.7%	32.7%	16	77
B	24.5%	57.1%	12	66
C	18.4%	75.5%	9	55
D	8.2%	83.7%	4	49
No award	16.3%	-	8	-

## 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.