



## External Assessment Report 2013

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

76% of the candidates gained an A or a B grade. This indicates how well teachers prepared their candidates and the level of the ability of the candidates. 94.1% passed and the means for the written paper and fieldwork were 67/95 and 10.5/15 respectively.

## Areas in which candidates performed well

- ◆ Q3c) and Q8c) Placing geological events in order from a block diagram and a map.
- ◆ Q4a) Drawing a graph.
- ◆ Q6a) and b) Naming fossils and fossil parts.
- ◆ Q6c) Identifying features of a burrowing sea urchin.
- ◆ Q8f) Safety precautions in the field.
- ◆ Q9a) Evidence that sea level has changed.

## Areas which candidates found demanding

- ◆ Q1c) Identifying metamorphic rocks from a graph and other features provided.
- ◆ Q4d)i) Explaining the formation of sheet joints.
- ◆ Q4d)iii) Working out a percentage increase.
- ◆ Q5c)ii) Calculating a ratio to its simplest whole number.
- ◆ Q7b) Working out the direction of strike.
- ◆ Q7c) Working out the angle of dip.
- ◆ Q7d) Working out the direction of dip of a fault plane.
- ◆ Q8b) Working out movement direction on either side of a fault.
- ◆ Q8e) Describing the difference between a lava flow and a sill in the field.
- ◆ Q9b) Deducing the number of sea levels in the past.
- ◆ Q10c)i) Calculating the speed of plate movement.
- ◆ Q12d) Explaining the difference between a transform and a tear fault.

## Advice to centres for preparation of future candidates

### Fieldwork

Standards remained high.

### Written Paper

The responses of most candidates were very pleasing. Some weaknesses were apparent, however, in the following areas:

- ◆ Metamorphic rocks
- ◆ Calculations
- ◆ Dip and strike

- ◆ Movements on either side of a fault
- ◆ Sills and lava flows
- ◆ Transform and tear faults.

## Statistical information: update on Courses

### Intermediate 2 Geology

Number of resulted entries in 2012	29
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Number of resulted entries in 2013	17
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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	58.8%	58.8%	10	77
B	17.6%	76.5%	3	66
C	17.6%	94.1%	3	55
D	0.0%	94.1%	0	49
No award	5.9%	100.0%	1	-

## 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.