



External Assessment Report 2014

Subject(s)	Geology
Level(s)	Intermediate 2

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

50% of the candidates gained an A grade and 90% achieved an A-C grade. This indicates how well teachers have prepared their candidates and the level of ability of the candidates. The mean for the written paper was 62.8/95 and the mean for the fieldwork was 10.7/15.

Areas in which candidates performed well

- ◆ Question 1(a) and (b): Identifying minerals and rocks.
- ◆ Question 3(d) and 10(f): Placing geological events in order from a block diagram and a map.
- ◆ Question 4(a): Identifying safety precautions needed in field work.
- ◆ Question 4(b) and (c): Drawing a borehole and correlation lines.
- ◆ Question 4(d): Explaining the formation of pillow lava.
- ◆ Question 5: Analysing graph work.
- ◆ Question 6(a) and (b): Naming fossils and fossil parts.
- ◆ Question 7(a), (b) and (c): Working out the location and the time of an earthquake.
- ◆ Question 7(d): Explaining how a seismometer works.
- ◆ Question 9(d): Working out a percentage increase.
- ◆ Question 12(c): Calculating a ratio to its simplest whole number.
- ◆ Question 13 (b) and (c): Explaining graded bedding and way-up structures.

Areas which candidates found demanding

- ◆ Question 1(c): Identifying chalk.
- ◆ Question 2: Explaining the features shown in lava.
- ◆ Question 6(c): Identifying the bivalve found at location 2.
- ◆ Question 11(a) and (c)(i): Answering both parts of each question on sea and land level changes.

Advice to centres for preparation of future candidates

Fieldwork

No advice seems needed since standards remain high. This is pleasing since candidates must pass this component to obtain a pass in Unit 2.

Written Paper

The responses of the majority of the candidates were good. The arithmetical ability of the candidates on average was better than in previous years.

Some weaknesses were noted in a few areas:

- ◆ Identifying chalk
- ◆ Explaining features found in lava flows
- ◆ Answering fully the questions on sea and land level changes, where there were two parts to the answer.

Statistical information: update on Courses

Number of resulted entries in 2013	17
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Number of resulted entries in 2014	11
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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	45.5%	45.5%	5	77
B	0.0%	45.5%	0	66
C	27.3%	72.7%	3	55
D	9.1%	81.8%	1	49
No award	18.2%	-	2	-

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.