



## External Assessment Report 2010

Subject	<b>Geology</b>
Level	<b>Intermediate 2</b>

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

The majority of the candidates seemed well prepared. The candidates were of a varying range of ability and the results reflect this. The highest mark was a strong 92/110 and over 50% of the cohort obtained a C grade or better. The mean fieldwork mark was 10/15 and the mean for the written paper was 50.6/95. The number of entries increased this year.

## Areas in which candidates performed well

### Written Paper

- ◆ Question 2 (b) Fieldwork safety questions.
- ◆ Question 3 (b) and 4 (d) Order of geological events.
- ◆ Question 5 (a) Evidence of weathering and erosion processes in a river.
- ◆ Question 6 (b) Identifying plates and indicating their direction of movement.
- ◆ Question 6 (e) (iv) Predicting the depth of ocean crust.
- ◆ Question 8 (b) Dinosaurs.

## Areas which candidates found demanding

- ◆ Question 2 (c) Few candidates could tell the difference between a sill and a lava flow.
- ◆ Question 2 (d) Identifying spotted rock, hornfels and metaquartzite from diagrams and explaining how these rocks were formed.
- ◆ Question 6 (a) Selecting the correct evidence that supported continental drift.
- ◆ Question 6 (d) Drawing diagrams to show the difference between a tear and a transform fault.
- ◆ Question 7 (a) Isostasy.
- ◆ Question 7 (d) Rate of isostatic uplift explanation.
- ◆ Question 8 (b) Sea urchins and their different modes of life.
- ◆ Question 10 (a) and (b) Explaining the location of earthquakes and volcanoes.
- ◆ Question 11 Ratios.
- ◆ Question 12 (a) Recognising fossil footprints.
- ◆ Question 12 (b) Cross cutting relationships.
- ◆ Question 12 (c) Identifying features typical of a delta environment.

## Advice to centres for preparation of future candidates

### Fieldwork

Standards remain high.

## **Written Work**

Whilst many candidates performed well, weaknesses commonly appeared in the following areas:

- ◆ Explaining the difference between a sill and a lava flow.
- ◆ Drawing transform and tear faults.
- ◆ Knowledge of spotted rock, hornfels and metaquartzite.
- ◆ Ratios.
- ◆ When describing a relationship between two variables where two marks had been allocated, candidates did not describe the relationship in enough detail.
- ◆ Trace fossils.

## Statistical information: update on Courses

Number of resulted entries in 2009	10
Number of resulted entries in 2010	21

## 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	19.0%	19.0%	4	77
B	19.0%	38.1%	4	66
C	19.0%	57.1%	4	55
D	14.3%	71.4%	3	49
No award	28.6%	100.0%	6	—

### 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.